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ABSTRACT

Designed to provide the legal practitioner with the basic tools to understand the international telecommunications field, this document was originally prepared in connection with the 1983 Conference on International Telecommunications. An introductory chapter focuses on where policy is made and lists international organizations involved with telecommunications policy; United States Government Executive Branch Agencies, their functions, and staff; and relevant congressional committees and their key members, staff, and current interest in international telecommunications. Other pertinent legislative branch organizations are also described. Separate chapters then cover the International Telecommunication Union, regulatory environment, transborder data flow, telecommunications and trade policy, and intellectual property. For each topic, an introductory essay describing important developments and major concerns is followed by selected materials which include United States laws, regulations, and proposed legislation; judicial and administrative decisions; treaties and agreements; a description of the ongoing activities of key international organizations; a description of the Executive Branch Interagency and Public Advisory Committees; a selected bibliography; and additional information. A glossary and conclusions are provided. (LMM)

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ISSUES IN INTERNATIONAL TELECOMMUNICATIONS POLICY: A SOURCEBOOK

Edited and Annotated
by Jane H. Yurow

The George Washington University
Center For Telecommunications Studies

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PREFACE

The U.S. Council for World Communications Year (WCY) 83 is pleased to extend WCY endorsement to Issues in International Telecommunications Policy: A Sourcebook. As a guide and reference manual, this sourcebook will have great value beyond WCY 83.

This volume should serve well the lawyer, executive, or policy person who strives to grasp the relationship between the design and application of communications and information technologies and the laws, regulations, and treaties the people of various nations have drafted to capture benefits and limit risks. The Board members of the U.S. Council for WCY 83 are convinced, therefore, that this sourcebook serves the objectives of WCY.

Carol Lee Hilewick, Ph.D.
Executive Director

ANNEE MONDIALE DES COMMUNICATIONS
WORLD COMMUNICATIONS YEAR
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1983

Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the publisher, or the organization with which each author is affiliated.

TO MY HUSBAND

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C. Randall Jacobson is Director of the International Trade Program, Technology Analysis Group, consultants to industry and government on telecommunications, information, and trade policy. Before joining Technology Analysis Group, she was a telecommunications policy analyst in the office of International Affairs, National Telecommunications and Information Administration. While at NTIA, she wrote "The Employment Effects of Trade in High-Technology Telecommunications and Information Products." Ms. Jacobson received her M.S. in International Relations from the Georgetown University School of Foreign Service, and her B.A. from Carleton College.

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ABOUT THIS SOURCEBOOK

This sourcebook is the first attempt to gather between the covers of a single volume a wide variety of information about various aspects of international telecommunications policy that are useful to attorneys, businessmen, scholars, and international telecommunications mavens. There are many topics that a book of this sort could address under the rubric of international telecommunications policy.

The subjects included in this particular volume are: the International Telecommunication Union, Regulatory Environment, Transborder Data Flow, Telecommunications and Trade Policy, and Intellectual Property. Other, equally important topics such as national security, mass media, economic development, and standards are, by necessity, dealt with only in passing. These merit a volume of their own.

An introductory chapter precedes the five chapters on specific substantive areas of telecommunications policy. It focuses on where policy is made and contains information including: a list and description of international organizations involved in some way with telecommunications policy; a list of U.S. Government Executive Branch Agencies, their functions, and the names and titles of staff currently responsible for carrying out these functions; a list of relevant Congressional Committees, their key Members and staff, current interest in international telecommunications, and a description of other pertinent Legislative Branch organizations. The annotated bibliography at the end of the chapter contains a selection of books and periodicals which address the broad range of telecommunications-related concerns. Additional titles appear in the bibliographies at the end of each chapter.

Information relevant to each of the five subjects comprises a separate chapter. An introductory essay describing important developments and major concerns provides the context for each chapter. Selected materials appropriate to the topic discussed in the essay comprise the rest. Each chapter contains: U.S. laws, regulations, and proposed legislation; judicial and administrative decisions; treaties and agreements; a description of the on-going activities of key international organizations; a description of Executive Branch Interagency and Public Advisory Committees, including key staff and industry representatives; and a selected, annotated bibliography. In addition, categories of information uniquely appropriate to particular subjects can be found in individual chapters.

The annotated summaries of laws, opinions, and treaties are intended to provide the reader with brief accounts of the contents of specific references in order to provide guidance as to useful sources for further research. These are not designed to be authoritative in and of themselves. Anyone wishing to cite them in formal documents should refer to the original statute, opinion, or treaty to verify or amplify the information.

The references included in this volume are selective and do not represent an attempt at comprehensive coverage of the various subjects addressed. Inasmuch as the purpose of this sourcebook is to provide useful assistance to persons needing information about international telecommunications policy, readers' suggestions as to additional useful references will help to make future editions or supplements more valuable to the growing community of persons interested in this complex, exciting subject.

I wish to extend my personal thanks to the Federal Communications Bar Association and to the International Law Institute for their support during the writing and publication of the conference edition of this book and to the George Washington University Center for Telecommunications Studies for publication of this volume. I also wish to express my appreciation to Shoshanna Riemer and Dominique Hawker for their significant support and assistance in preparing this volume, and to thank the authors of the various essays, Veronica M. Ahern, Anthony M. Rutkowski, Leslie A. Taylor, Kenneth W. Leeson, C. Randall Jacobson, Robert F. Aldrich, Carol S. Blumenthal and Tedson J. Meyers for their invaluable contributions; Rosalind S. Kurz, and Victoria S. Saenger (Fisher, Wayland, Cooper & Leader) for their work on the intellectual property chapter; and Susan Colman for her assistance on the transborder data flow chapter.

Finally, although I cannot list them all, I would like to state my appreciation for the willing assistance I have received from so many people who have supplied me with information, referred me to sources, reviewed various draft chapters, or given me the moral support necessary to complete this volume.

Jane H. Yurow
Chevy Chase, Maryland
September 1983

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INTRODUCTION

Veronica M. Ahern

International telecommunications is an area of legal expertise that has long been considered arcane and best left to diplomats and lovers of the paradoxical. This volume, originally prepared in connection with the 1983 Conference on International Telecommunications, co-sponsored by the Federal Communications Bar Association and the International Law Institute of Georgetown Law Center, is intended to provide the legal practitioner with the basic tools necessary to understand the international telecommunications field.

If the concepts of domestic telecommunications policy are thought to be complex, international policy and practice is a hornet's nest of conflicting aims, incentives, and interests. Creating from these conflicts a comprehensive pattern, susceptible to the principles of precedent, has traditionally been the exclusive province of a small number of practitioners.

In recent years, however, a growing number of lawyers, economists, technologists, and politicians have become interested in the international telecommunications field, despite its mystic qualities. This interest begins with the pragmatic realization that the future national well-being depends upon an adjustment to what Wilson Dizard has called "The Coming Information Age."

Other social historians have described this phenomenon as the "information society," the "post-industrial age," and the "high-tech era." Yet all seem to agree on the basic change which is occurring. Just as the Industrial Revolution transformed the nature of the American economy, so it is beleived that the Information Age will do the same. Accordingly, such traditional businesses as manufacturing, textiles, and construction will contribute less to our economic system, while the information industries will contribute more. Not only is this reflected in employment statistics that show that over 60 percent of American workers are directly involved in the creation, processing, and distribution of information, but it is also apparent from the growth and the acceptance of computer technology in daily life. Indeed, Americans are now using their TV sets to play video games and prepare the household budget.

Telecommunications is, of course, the life blood of an information economy. The processing and distribution of information depends upon an efficient system. Recognizing the integral part telecommunications plays in the new era, U.S. telecommunications policy makers and practitioners have, for several years, been struggling to develop a philosophy to guide its role as the 21st century approaches. An increasingly significant part of this philosophy is its international aspect.

A practical example can illustrate this point. Ten years ago, a typical broadcast lawyer might not have deemed it necessary to learn very much about communications satellites. Today the opportunities for program distribution by satellites capable of serving more than one city, state, country, or even hemisphere are obvious. Their technology has thus begun to effect a change upon the well-settled principles of localism in broadcasting. A satellite's footprint may well spillover into the territory of several nations.

Moreover, the operational parameters of a satellite will not be established solely by the regulatory authority of its sponsoring country. Its orbital location and spectrum use will, at least in part, be determined by the outcome of multilateral conferences. These conferences, held under the auspices of the International Telecommunication Union (ITU), will address questions of access to the geostationary orbit for all countries and will have a profound impact on the future development of telecommunications technology and services between and within countries.

Another example of the force of supra-national considerations involves the requirements of multinational enterprises. These institutions are responsible for the growing interdependence of national economies. Integral to their operations is the necessity to transfer information from one country to another efficiently and quickly. This, of course, depends on the adequacy and reliability of the telecommunications infrastructure. On a more sophisticated level, it also depends on the willingness of participating nations to have that transfer occur. As information replaces manufactured goods or raw materials as the strategic resource of our global economic system, that willingness is threatened. For example, some countries seek to protect indigenous telecommunications and information services industries through the imposition of tariffs on foreign information, treating it as a commodity, subject to economic regulation similar to any tangible product.

The Information Age is coming not only in the United States but elsewhere in the developed and developing world. As its importance is recognized, fundamental changes to the international trading system will occur. The social principle of free flow of information will need to be examined and considered, perhaps, as an economic principle as well.

These two examples are meant to be representative of the kinds of issues which are proliferating in the international telecommunications field. Unfortunately, neither the U.S. domestic nor the international community is well prepared to address them. Controversies occurring in the United States have either been resolved on an ad hoc basis or ignored. To some extent this is understandable since resolution is complicated by the number of governmental and non-governmental entities that are interested parties. However, this optimistic approach is changing as those entities recognize the necessity of developing a comprehensive solution.

As the importance of the international telecommunications industry to our economic future becomes more obvious, the problems are likely to

multiply. It is essential, then, that the best legal and analytical minds be applied to the resolution of these problems. It is the purpose of this volume to provide a foundation for the development of expertise and concern.

CHAPTER I

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

INTERNATIONAL ORGANIZATIONS

United Nations Organizations

United Nations (UN)
United Nations Plaza
New York, New York 10017

Javier Perez de Cuellar
Secretary-General

Membership: About 160 nations.

Purpose. Attempts to solve international economic and social problems through cooperation among its members. Has several agencies concerned with telecommunications and information issues, including the ITU, UNESCO (including IPDC), COPUOS, UNCTAD, UNCITRAL, UPU, ECOSOC, UN Commission on TNCs, WIPO, ICAO, IMO, UNDP, ESCLA, ESCAP, ECWA, ECA, and UN Committee on Information. (See below.)

United Nations Educational, Scientific, and
Cultural Organization (UNESCO)
7, Place de Fontenoy
75700 Paris, France

Amadou-Mahtar M'Bow
Director General

Membership: About 160 nations.

Purpose. Promotes exchanges and collaboration among nations in the fields of education, natural sciences, social sciences, culture, and communications. Is concerned with a range of issues from journalistic ethics to the development of communications facilities in developing countries. (Specialized agency of the UN)

International Copyright Information Centre (UNESCO)
7 Place de Fontenoy
F-75007
Paris, France

Amadou-Mahtar M'Bow
Director General

Membership: UN member nations.

Purpose. Serves as a clearinghouse for copyright information.

International Program for the Development of
Communication
(IPDC)
7, Place de Fontenoy
75700 Paris, France

Sarath Amunugama
Director

Membership: Member nations of UNESCO.

Purpose. Assists in meeting the practical communication needs of developing countries through developing project proposals for training and procurement of equipment, and by identifying other practical needs of developing countries.

United Nations Committee on the Peaceful Uses
of Outer Space (COPUOS)
United Nations Plaza, Room A-555B
New York, New York 10017

Prof. Yash Pal
Secretary-General

Membership: 47 nations.

Purpose. Studies the legal problems arising from the use of outer space. The Outer Space Treaty of 1967 (see Ch. III) serves as the basis for its focus on 1) equal access to space by all nations; 2) use of space in the interests of peace, security, cooperation, and understanding, in accordance with international law; and 3) use strictly for nonmilitary purposes.

United Nations Conference on Trade and Development
(UNCTAD)
Palais des Nations
1211 Geneva 10, Switzerland

Gamani Corea
Secretary-General of the Conference

New York Liaison Office/UNCTAD
Room 927F
United Nations
New York, New York 10017

Mr. Zenon Carnapas, Chief
Liaison Office for UNCTAD

Membership: Is open to any UN member nation and its specialized agencies. There are currently 166 members: 157 members of the UN, 9 others from specialised agencies. Africa, Asia - 94, W. Europe - 30, Latin America - 32, Eastern Europe - 10.

Purpose. Promotes international trade among all countries, especially those at different stages of development. Cooperates with the General Assembly and ECOSOC in respect to performance of their Charter responsibilities. Harmonizes trade and development policies of government and regional economic groups, including the area of telecommunications trade.

UN Commission on International Trade
Law (UNCITRAL)
Vienna International Center
P.O. Box 500
A-1400 Vienna, Austria

Kazuaki Sono
Secretary

Membership: 36 States: Africa - 9, Asia - 7, Eastern Europe - 6, Latin America - 9, Western Europe and others - 5.

Purpose. Promotes progressive harmonization and unification of the law of international trade. Currently interested in issues of telecommunications-related trade.

Universal Postal Union
Case Postale
CH-3000, Bern 15
Switzerland

Mohammad Ibrahim Sobhi
Director General

Membership: 163 countries.

Purpose. Secures the organization and improvement of postal services to promote international cooperation in the delivery of mail. Focuses on establishing standards and operating procedures for the international exchange of mail, including electronic mail issues, tariffs on mail, and subsidies of mail systems.

United Nations Economic and Social
Council (ECOSOC)
United Nations
New York, New York 10017

Robert G. Miller
Assistant Secretary-General, Office of Secretariat Services for Economic and Social Matters

Membership: 54 members: Africa - 14, Asia - 11, Latin America - 10, W. Europe - 13, E. Europe - 6.

Purpose. Encourages international cultural and educational cooperation, a higher standard of living, and progress. The UN Commission on Transnational Corporations, which is currently studying national policies on transborder data flow, falls within the jurisdiction of ECOSOC.

United Nations Centre on Transnational Corporations (UNCTC)
(Established by ECOSOC)
Room B.R.-1001
United Nations Plaza
New York, New York 10017

Nikolai Sadtchikou
Secretary

Klaus A. Sahlgeren
Executive Director of the Centre

Membership: 48 nations.

Purpose. Strengthens the negotiating capability of developing countries vis-a-vis transnational corporations (TNCs). Transborder data flow is a permanent agenda item. The Centre assists the Commission in fulfilling its agenda. In this context, the Centre has called for national papers describing telecommunications and information policies as these relate to international data flows of multinational corporations. The United States has agreed to submit a paper. The Center is also studying the international data market and TNCs' collection and use of remote sensing data.

World Intellectual Property Organization (WIPO)
24, Chemin des Colombettes
1211 Geneva 20, Switzerland

Dr. Arpad Bogsch
Director General

Membership: 97 nations.

Purpose. Promotes the protection of intellectual property through cooperation among nations, administers the various "unions", each founded on a multilateral treaty, and deals with the legal and administrative aspects of intellectual property. (Specialized agency of the UN)

(See description in Ch. VI.)

International Telecommunication Union (ITU)
Place des Nations, 1211
Geneva 20, Switzerland

Richard Butler
Secretary-General

Richard Kirby
Director -- Consultative Committee on Radio Communications (CCIR)

Leon Burtz
Director -- Consultative Committee on Telegraph & Telephone (CCITT)

Membership: About 160 nations.

Purpose. Provides administrative and consultative forums to develop detailed arrangements for international telecommunications, as well as various administrative bodies to implement them. (Specialized agency of the UN)

International Civil Aviation Organization (ICAO)
PO Box 400
International Aviation Square
1000 Sherbrooke Street
W. Montreal PQ H3A 2R2
Canada

Yves Lambert
Secretary-General

Membership: 150 nations.

Purpose. Develops the principles and techniques of international air navigation and fosters the planning and development of international civil aviation, including promoting safety of flight.

International Maritime Organization (IMO)
101-104 Picadilly
London, W1 VDHE
England

C.P. Srivastava
Director General

Membership: 122 countries.

Purpose. Establishes technical standards for maritime safety and for the prevention of marine pollution. (Specialized agency of the UN)

United Nations Development Program (UNDP)
United Nations Plaza
Room DC-2128
New York, New York 10017

F. Bradford Morse
Administrator

Membership: Members of the UN or any UN specialized agency.

Purpose. Provides developing countries with technical cooperation and assistance for economic development. It is the central organization in the UN system for technical cooperation between developed and developing countries, including cooperation in development and use of telecommunications technologies.

Economic and Social Council for Asia
and the Pacific (ESCAP)
United Nations Building
Rajdamnem Avenue
Bangkok, Thailand

S.A.M.S. Kibria
Executive Secretary

Membership: All UN members.

Purpose. Undertakes development projects and surveys related to telecommunications in this region.

Asia Pacific Telecommunity
co/ESCAP
Sala Santitham,
Rajadamnern Avenue
Bangkok 2, Thailand

Membership: Governments of Afghanistan, Bangladesh, Burma, China, India, Iran, Japan, Korea, Malaysia, Nepal, Pakistan, Phillippines, Singapore, Australia, Naura, Papua-New Guinea.

Economic and Social Council for Latin America (ESCLA)
Edificio Naciones
Avenida Dag Hammerskjold
Vitacura
Santiago, Chile
(Mailing address: Casilla 179-D, Santiago, Chile.)

Enrique Iglesias
Executive Secretary

Membership: All UN members.

Purpose. Same as ESCAP for Latin America.

Economic and Social Council for Africa (ECA)
P.O. Box 3001
Addis Ababa, Ethiopia

Adebayo Adedeji
Executive Secretary

Membership: All UN members.

Purpose. Same as ESCAP for Africa.

Economic and Social Council for Western Asia
(ECWA)
P.O. Box 27
Bagdad, Iraq

Mohammed Said Al-Attar
Executive Secretary

Purpose. Same as ESCAP for Western Asia.

United Nations Committee on Information
United Nations, Room S-1027C
New York, New York 10017

Membership: 67 members representing a regional cross-section of the General Assembly.

Purpose. A three-fold mandate that: 1) continues to examine UN public information policies and activities in light of the evolution of international relations; 2) evaluates and follows up the effort made and progress achieved by the UN system in the field of information and communications; and 3) promotes the establishment of a new, more just and effective world information and communications order.

Economic and Social Organizations

Council of Europe
(Conseil de l'Europe)
Avenue de l'Europe
F-67006 Strasbourg CEDEX
France

Franz Karasek
Secretary General

Membership: 21 European nations: Austria, Belgium, Cyprus, Denmark, France, Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Liechtenstein, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom.

Purpose. Implements and enforces the European Convention of Human Rights of 1950 to work for greater European unity, improve living conditions and develop human values in Europe, and uphold the principles of parliamentary democracy and human rights. Has devoted special attention to television, new broadcasting techniques, and the challenges of the mass media in general. Also, has adopted a convention on protection of personal data. (See Ch. IV.)

The European Community (EC)
Rue de la Loi 200
B-1049 Brussels, Belgium

Gaston Thorn
President of the Commission of the European Communities

Membership: Belgium France, the Federal Republic of Germany, Italy, Luxembourg, Netherlands, Denmark, Ireland, United Kingdom, Greece. Applications of Portugal and Spain are pending.

Purpose. Serves as a vehicle for cooperation and unity among its members in matters of common economic, political, and cultural interests. The European Parliament is the legislative arm of the EEC. The EEC coordinates EURONET, the pan-European online information network. It is also considering proposals to ratify the Convention of the Council of Europe on protection of personal data.

General Agreement on Tariffs and Trade (GATT)
Centre William Rappard
Rue de Lausanne 154
CH-Geneva, 21, Switzerland

Arthur Dunkel
Director General

Membership: 87 contracting parties, 1 provisional accession, and 30 States which have applied for membership.

Purpose. Monitors and administers a multilateral agreement of the same name that aims to liberalize world trade and place it on a secure

basis. The GATT is the only multilateral instrument that sets agreed rules for international trade.

(See description in Ch. V.)

Inter-American Development Bank (IDB)
808 17th Street, N.W.
Washington, D.C. 20577

Antonio Ortiz Mena
President

Membership: 44 nations (including most OAS members, EC members, and others).

Purpose. Supports regional development projects, including telecommunications.

Intergovernmental Bureau for Informatics (IBI)

Biale Civilta del Lavora 23
00144 Rome, Italy

Fermin A. Bernasconi
Director

Membership: 35 member countries, most of which are developing countries. France, Italy, Iceland and Spain are some of the developed countries that are members. France provides most of the budget for IBI.

Purpose. Provides a forum for developing countries to discuss the economic, social, and legal effects of electronic technologies and to promote informatics policies which benefit them. Originally part of UNESCO.

(See description in Ch. IV.)

The Nordic Council
Nordisk Raad
Christiansborg Palace
DK 1218
Copenhagen K. Denmark

Membership: Denmark, Finland, Iceland, Norway, Sweden.

Purpose. Concentrates on regional communications and cultural issues. Current telecommunications interest is in distributing national television programs among Nordic countries and in studying subregional direct broadcast satellite systems. Also, currently developing the NORDSAT system.

Organization for Economic Cooperation and Development
(OECD)
2 Rue Andre-Pascal
Paris 16, France

Emile van Lennup
Secretary-General

Membership: 24 industralized countries: Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

Purpose. Studies and recommends policies and negotiates voluntary international agreements designed to: achieve the highest sustainable economic growth, employment, and a rising standard of living in member countries; contribute to sound economic expansion in member and nonmember countries in the process of economic development; and contribute to the expansion of world trade on a multilateral nondiscriminatory basis in accordance with international obligations. Has developed guidelines on protection of personal data and on investment.

There are 5 standing committees concerned with telecommunications and information issues: the Trade Committee, the Industry Committee, the Committee on International Investment and Multinational Enterprises, the Committee for Scientific and Technological Policy, and the Committee on Information, Computer, and Communications Policy.

(See description in Chs. IV and V.)

Business and Industry Advisory Council to the OECD (BIAC)

13-15 Chausee de la Moette
Paris 75016, France

Yolande Michaud
Secretary General

Membership: Firms and trade associations interested in the work of the OECD.

Purpose. Advises the OECD on private industry perspectives on trade, transborder data flow, investment, and other economic issues, including those related to electronics and information.

USA BIAC
1212 Avenue of the Americas
New York, New York 10036

David L. Grove
President
U.S. Council for International Business

Trade Union Advisory Council to the OECD (TUAC)

Avenue de la Grande Armee 26
F-75017 Paris, France

Kari Tapiola
Secretary-General

Membership: Trade unions interested in the work of the OECD.

Purpose. Advises the OECD on issues that are important to the trade union movement, including unemployment as a consequence of widespread use of electronic technologies.

The World Bank
1818 H Street, N.W.
Washington, D.C. 20433

A.W. Clausen
President

Membership: 144 States.

Purpose. Provides financial and technical assistance to developing countries. Funds telecommunications earth stations for domestic and international traffic. Is studying the feasibility of using satellites for education. Also, is interested in funding remote sensing projects, especially for renewable resources.

Technical Organizations

Andean Pact (Pacto Andino)
3895 Avenida Paseo de la Republica
Lima, Peru

Edgar Moncayo
Coordinator

Membership: Majority of Latin American countries.

Purpose. In general, is a customs and free trade zone between Latin nations. Under its foreign investment code, broadcasting is a category of services protected by the signatories with respect to direct investment and commercialization of programs. Telecommunications corporations and government officials meet regularly to consider integration of policies and planning.

Allied Radio Frequency Agency (ARFA)
c/o NATO
B-1110
Brussels, Belgium

Membership: NATO Alliance: Belgium, Canada, Denmark, France, Germany, Greece, Italy, the Netherlands, Norway, Portugal, Turkey, United Kingdom, United States.

Purpose. Conducts radio frequency planning in support of allied war plans and frequency coordination for day-to-day operations of the member administrations.

The Customs Cooperation Council
Rue de l'Industrie, 26-38
B1040
Brussels, Belgium

Sir Ronald Radford
Secretary-General

Membership: Virtually all trading countries in the world, represented by their customs administrations.

Purpose. Improves and harmonizes customs operations in order to facilitate international trade. Currently the Customs Cooperation Council is studying the technical aspects of the GATT Valuation Code, including the issue of computer software valuation.

International Organization for Standardization (ISO)
CP 56
Rue de Varembe 1
CH-1211 Geneva 20
Switzerland

Olle Sturen
Secretary-General

Membership: 89 national standards bodies.

Purpose. Works toward agreement on international technical standards for a rangé of equipment, including telecommunications and computer-related equipment. The American National Standards Institute (ANSI), a private cooperative organization, is the U.S. representative to the ISO.

Satellite Organizations

International Communications Satellite Organization
(INTELSAT)
490 L'Enfant Plaza, S.W.
Washington, D.C. 20024

Santiago Astrain
Director General
Richard Colino (designate)

Membership: 108 countries.

Purpose. Owns and operates the satellites used by most of the world for international, and by some countries, domestic communications.

(See description in Ch. III.)

International Maritime Satellite Organization
(INMARSAT)
40 Melton Street
London, United Kingdom NW12EQ

Olof Lundberg
Director General

Membership: Open to all States. 37 countries as of June 30, 1982, with more in the process of acceding.

Purpose. Provides for the space segment necessary to improve maritime communications, including distress and safety of life at sea communications, management of ships, maritime public correspondence services, and radio determination capabilities.

INTERCOSMOS
Soviet Interkosmos
Academy of Sciences
Leninsky Prospect 14
117901
Moscow, USSR

Vladimir Kotelnikov
Academician

Membership: Mongolia, Poland, Rumania, the USSR, and Vietnam.

Purpose. Promotes comprehensive cooperation in the peaceful exploration and use of outer space. Subjects addressed include space physics, space meteorology, space biology and medicine, space communications, and investigation of the earth by means of aerospace techniques.

International System and Organization of Space Communications (INTERSPUTNIK)

Address and Directorship - same as for INTERKOSMOS

Membership: Open to all states. Current members are Afghanistan, Bulgaria, Cuba, Czechoslovakia, Democratic Yemen, the German Democratic Republic, Hungary, Mongolia, Poland, Rumania, the USSR, Vietnam, Nicaragua.

Purpose. Facilitates the exchange of radio and television programs, telephone and telegraph links, and other types of information conduits among member countries.

European Space Agency (ESA)
8-10 Rue Mario Nikis
F-75738 Paris CEDEX 15, France

Erik Quistgaard
Director General

Membership: 11 States: Belgium, Denmark, France, Federal Republic of Germany, Ireland, Italy, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom. Austria and Norway participate in some programs as associate member states and Canada, through a co-operation agreement.

Purpose. Provides for and promotes, for exclusively peaceful purposes, co-operation among European States in space research and technology. It elaborates and implements a long-term European space policy, co-ordinates and integrates national and European programs, and maintains the space segments of the EUTELSAT satellite system. (See below.)

EUTELSAT
Tour Maine-Montparnasse
33 Avenue de Maine
75755 Paris Cedex 15, France

Andrea Caruso
Secretary-General

Membership: 17 countries: Austria, Belgium, Denmark, Finland, France, Federal Republic of Germany, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, Yugoslavia.

Purpose. A pan-European organization created on June 30, 1977, by several Ministries of Post and Telecommunications recognized by the Conference Europeenne des Postes and Telecommunications (CEPT) in order to establish European satellite telecommunications systems. Presently, is establishing a system for fixed service telephony, telex, data transmission, radiobroadcasting, television, (called ECS) and maritime service (called MAROTS).

European Conference on Satellite Communications (CETS)
Neuilly-sur-Seine, France
(Established by CEPT in 1963, see below.)

Membership: Open to all members of CEPT.

Purpose. Acts as a medium of consultation for European interests in global telecommunications. Main purpose was achieved with the conclusion of the INTELSAT agreement.

Arab Satellite Communication Organization (ARABSAT)
P.O. Box 1038
Riyadh, Saudi Arabia

Ali Al-Mashat
Director General

Membership: 21 States: Algeria, Bahrain, Democratic Yemen, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

Purpose. Establishes, operates, and maintains a regional telecommunications system for the Arab region.

Telecommunications Organizations

Conference of European Postal and Telecommunications Administrations (CEPT)
A 1011
Vienna, Austria

Liaison Office
Aarbergergasse 5, CP
CH-3001
Bern, Switzerland

Membership: Austria, Belgium, Denmark, Finland, France, Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. Only members of the European PTTs, which are also members of the UPU, or the ITU can belong to CEPT.

Purpose. Maintains and extends international cooperation for the use of telecommunications among European nations to coordinate national policies, practices, and standards in telecommunications services. Currently focuses on Integrated Services Digital Network and North Atlantic Consultative Process. Has established a standard for videotex.

La Conferencia Interamericana de Telecomunicaciones (CITEL)
c/o Organization of American States
1889 F Street, N.W.
Washington, D.C. 20006

Mario Pachajoa
Permanent Secretary

Membership: 30 member countries of the Organisation of American States.

Purpose. Facilitates consultation and cooperation among member states to assist with the orderly development of telecommunications in the Western Hemisphere.

Pan-African Telecommunications Union (PATU)
BP 8634
Kinshasa 1
Zaire

Bobo Camara
Secretary General

Membership: Members of the Organization for African Unity (OAU).

Purpose. Established as a specialised agency of the OAU in 1977 as a result of the regional cooperation connected with the development of the Pan African Telecommunications Network (PANAFTEL).

African Telecommunications Union (ATU)
c/o Telecommunications Division, Organization for
African Unity (OAU)
P.O. Box 3243
Addis Ababa, Ethiopia

Membership: Members of the OAU.

Purpose. Supports in every field the interests of the African broadcasting and television organizations adhering to the statutes. Establishes relations with other international organizations. Promotes coordination and development of African radio and television.

Union des Radiodiffusions et Televisions Nationales
d' Afrique (URTNA)
101 Rue Carnot
B.P. 3237
Dakar, Senegal

A. Marzouki
Secretary General

Membership: Active: radio and television organizations in 30 countries. Associate: radio and television organizations in 7 countries.

Purpose. Supports the interests of African broadcasting and television organizations adhering to the statutes. Establishes relations with other international organizations. Promotes coordination and development of African radio and television.

Arab Telecommunications Union (ATU)
P.O. Box 5377
Baghdad, Iraq

Association of the National Telecommunications
Administrators of the Andean Area (ASETA)
Casique 6042
Quito, Ecuador

Jaime Aguillera Blanco
Secretary General

Membership: Ecuador, Bolivia, Peru, Venezuela, Colombia.

Purpose. Encourages the development and improvement of telecommunications services in the member states.

La Comision Tecnica Regional de Telecomunicaciones (COMTELCA)
Teguciagalpa, Honduras

Mauricio Montenegro
Supervisor

Membership: Honduras, Guatemala, El Salvador, Costa Rica, Nicaragua.

Purpose. Maintains and plans telecommunications services in the five member countries.

Regional Broadcasting Unions and Organizations

Arab States Broadcasting Union (ASBU) (Special Agency of the League of Arab States)
P.O. Box 65, 62 Nahy Ibn Albassan
Almanzah 4, Tunis, Tunisia

Salah Abdel Kader
Secretary General

Membership: 20 States: Algeria, Egypt, Libya, Mauritania, Morocco, Sudan, Tunisia, Bahrain, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syria, Yemen Democratic Republic, Yeman Republic.

Purpose. Promotes professional interchange on program, technical, and legal matters within this particular region as cultural groups. Is contemplating inter-continental exchanges via satellite.

Asia-Pacific Broadcasting Union (ABU)
NHK Broadcasting Centre
2-2-1 Jinnan, Shibuya-Ku,
Tokyo 150, Japan

P.O. Box 1164
Jalan Pantai Bhara
Kwala Lumpur 22-07
Malaysia

Membership: 26 national broadcasting companies: Egypt, Afghanistan, Bangladesh, China, India, Indonesia, Iran, Japan, South Korea, Laos, Malaysia, Nepal, Pakistan, Phillipines, Saudi Arabia, Singapore, Sri Lanka, Thailand, Vietnam, Australia, Fiji, New Zealand, Papua-New Guinea, Samoa, Kindgom of Tonga, Turkey.

38 associate members in 27 countries: Mauritius, Nigeria, Canada, USA, Bangladesh, Brunei, Hong Kong, Iraq, Japan, Jordan, South Korea, Lebanon, Pakistan, Phillipines, Australia, Gilbert/Ellice Islands, Guam, Micronesia, New Zealand, Solomon Islands, France, Germany, Netherlands, Sweden, Switzerland, United Kingdom, Yugoslavia.

Purpose. Same as ASBU.

Caribbean Broadcasting Union (CBU)
The Jamaica Broadcasting Corporation
5-9 South Odeon Avenue
P.O. Box 100
Kingston 10, Jamaica W1

B.C. (Tino) Barovier
President and Secretary General

Membership: Broadcasting organizations throughout the Caribbean area.

Purpose. Same as ASBU.

European Broadcasting Union
Ancienne Route 17A
Case Postale 193
Ch-1211 Geneva 20
Switzerland

Dr. R. de Kalbermatten
Secretary-General

Membership: 38 active members from Western Europe and the Mediterranean and 70 associate members from 46 countries worldwide.

Purpose. Same as ASBU.

International Radio and Television Organization (OIRT)
U Mrazovky 15
151 13 Praha 5
Czechoslovakia

J. Hrebik
Secretary-General

Membership: Broadcasting organizations in 25 countries, including the USSR and most of Eastern Europe.

Purpose. Same as ASBU.

Commonwealth Broadcasting Association (CBA)
Broadcasting House
London W1A 1AA
United Kingdom

Alva Clarke
Secretary-General

Membership: The Commonwealth national public service broadcasting authorities.

Purpose. Works for professional improvement of broadcasting in member organizations through collective study and mutual assistance.

Ibero-American Television Organization(OTI)
Varsovia 44
4 piso
Mexico 6 DF
Mexico

Amaury Daumas
Secretary-General

Membership: Television organizations in Spain, Portugal, and many Latin American countries.

Purpose. Same as CBA.

Inter-American Association of Broadcasters (IAAB)
Calle Yi 1264
Montevideo, Uruguay

Dr. Luis Alberto Sole
Director General

Membership: National broadcasting associations representing private radio and television stations throughout the Americas.

Purpose. Same as CBA.

Miscellaneous Organizations

International Institute of Communication
Tavistock House East
Tavistock Square, London, England WC1H 9LG, UK

William O'Neill Sweeney
Executive Director

Richard Straus
Secretary

Washington Office
1776 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Membership: Interested persons and organizations internationally.

Purpose. Provides a forum for discussion of international communications issues.

African Remote Sensing Council
Bamako, Mali

Membership: 22 African States.

Purpose. Is a cooperative body established by international treaty to harmonize remote sensing policies within the African continent and to promote such activities in the spirit of technical cooperation among member states.

International Federation of Library Associations
and Institutions (IFLA)
P.O. Box 82128
Netherlands Congress Building
Churehillplein 10
2508 EC Den Haag
Netherlands

Dr. Margaret Wijnstroom
Secretary General

Membership: Library associations, institutions, and affiliates in 115 countries.

Purpose. Promotes international understanding, cooperation, discussion, research, and development in all fields of library activity, including bibliography, information services, the education of library

personnel, and use of electronic technologies. Represents librarianship in matters of international interest.

Asian Institute for Broadcast Development
Kuala Lumpur, Malaysia

R. Balakrishnan
Director and Secretary to Council

Membership: Afganistan, Bangladesh, Fiji, India, Indonesia, Iran, Republic of Korea, Malaysia, Nepal, Pakistan, Papua-New Guinea, Philippines, Samoa, Singapore, Sri Lanka, Thailand, and Vietnam.

Purpose. Provides broadcasting training and development to countries of the ESCAP region.

Islamic States Broadcasting Services Organization
c/o Pakistan Broadcasting Corp.
Broadcasting House
Islamabad, Pakistan

Membership: 42 Islamic states.

Purpose. Protects the Islamic heritage. Strengthens fraternal ties among the Islamic peoples. Promotes Islamic solidarity. Propagates Islamic teaching and furthers cooperative relations with regional and international information and cultural organizations.

UNITED STATES GOVERNMENT PARTICIPATION

Executive Branch

DEPARTMENT OF STATE
Washington, D.C. 20520

William J. Schneider, Undersecretary for Security Assistance, Science, and Technology
Chairs the Senior Interagency Group for International Communication and Information Policy.
(See description in Ch. II.)

Ambassador Diana Lady Dougan, Coordinator for International Communication and Information Policy (Designate)
Responsible for coordinating international telecommunications and information policy, including preparation for international conferences, and articulating Administration positions on legislation and Executive Branch policy.

Office of Legal Advisor

Lucy Hummer, Assistant to the Legal Advisor
Responsible for legal apsects of ITU, intellectual property, transborder data flow, and telecommunications trade policy.

Thomas J. Ramsey, Assistant to the Legal Advisor
Responsible for legal aspects of State Department's international telecommunications operations.

Bureau of Economic and Business Affairs

Matthew V. Scocozza, Deputy Assistant Secretary of State for Transportation and Telecommunications

Earl S. Barbely, Director
Office of International Communications Policy
Participates in formulating U.S. positions on international issues on subjects such as the ITU, international regulation, and transborder data flow, and represents the United States in international conferences on these subjects.

Earl S. Barbely, Chairman
U.S. Organization for the Consultative Committee on International Telegraph and Telephone (CCITT)

Richard E. Shrum, Chairman
U.S. Organization on the Consultative Committee on Radiotelecommunication (CCIR)

Bureau of Oceans, Environment, and Science

Ahmed Meer, Director
Office of Advanced Technology
Responsible for technology assessment in areas of space, telecommunications, and satellites.

Bureau of International Organizations

James D. Phillips, Director
Office of Communications and UNESCO Affairs
Monitors and recommends policy regarding the political debate on free flow of information in all agencies within the UN system, as well as on all information issues discussed at the UN.

Bureau of Economic and Business Affairs

John McCarthy, Director
Office of Investment Affairs
Monitors international investment issues, including telecommunications investment, and participates in developing U.S. positions. Coordinates public advisory committees and working groups on investment, trade, and transborder data flow issues.

Theresita C. Shaffer, Director
Office of International Trade
Monitors and participates in developing U.S. positions on trade issues, including the trade aspects of telecommunications and information.

UNITED STATES INTERNATIONAL DEVELOPMENT CORPORATION (USIDC)
Washington, D.C. 20523

Peter McPherson
Director
Does policy planning, policy making, and policy coordination on the range of international economic issues affecting LDCs.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

AGENCY FOR INTERNATIONAL DEVELOPMENT (AID)
Washington, D.C. 20523

Ruth Zagorin
Director for Human Resources
Bureau of Science and Technology
Responsible for the research and development program on the use of telecommunications in development, and for providing expertise to AID officers worldwide in planning telecommunications projects.

Dr. Clifford D. Block, Telecommunications Specialist

FEDERAL COMMUNICATIONS COMMISSION (FCC)
1919 M Street, N.W.
Washington, D.C. 20554

Kalmann Schaefer, International Telecommunications Advisor
Responsible for advising the Chairman on international telecommunications matters. Frequently represents the Chairman at international conferences or in testimony before Congressional Committees.

Willard L. Demory, Assistant Bureau Chief-International Common Carrier Bureau
Responsible for administering the international common carrier regulatory program, including preparation of FCC view point for international meetings and conferences on common carrier-related issues.

Robert Powers, Chief Scientist
Office of Science and Technology
Edward Jacobs, Chief, International Staff
Office of Science and Technology
Responsible for administering international staff in preparation for international conferences.

Michael Marcus, Chief
Technical Analysis Division
Responsible for technical preparation for WARCs and RARCs.

Robert L. Cutts, Chief Spectrum Management Division
Responsible for analyzing international table of allocations of electromagnetic spectrum, notifying International Frequency Registration Board of frequency assignments, and maintaining a document center.

DEPARTMENT OF COMMERCE
14th and Constitution Avenue, N.W.
Washington, D.C. 20230

National Telecommunication and Information Administration (NTIA)

David J. Markey, Assistant Secretary for Communications and Information
Chief advisor to the President on telecommunications policy.
Responsible for certain mandated functions in international telecommunications, including oversight of Comsat (with State and FCC), and preparation (through IRAC) of U.S. positions for international meetings on radiofrequency spectrum and orbital allotment. Has an interest in all aspects of international telecommunications policy.

Richard H. Shay, Chief Counsel and Acting Director
Office of International Affairs
Responsible for day-to-day aspects of formulating international telecommunications policy and for Comsat oversight.

Richard D. Parlow, Acting Associate Administrator
Office of Federal Systems Spectrum Management
Responsible for the IRAC whose duties include coordinating the technical preparations for ITU meetings and conferences.

International Trade Administration (ITA)

Lionel H. Olmer, Undersecretary for International Trade
Responsible for representing the interests of United States industry internationally, for monitoring developments in trade, and for implementing trade-related legislation.

Alfred Kingon, Assistant Secretary for International Economic Policy
Monitors and formulates international trade policy, including policy relating to trade in telecommunications and information. Manages the Deputy Assistant Secretaries assigned to follow various regions of the world.

Paul T. O'Day, Acting Assistant Secretary for Trade Development
Responsible for trade development activities generally, including trade in telecommunications goods and services.

Brant W. Free, Director
Office of Service Industries
Responsible for services trade activities generally, including promotion of trade in services, foreign corrupt practices, export trading companies, and international telecommunications and information services policy and promotion.

Timothy J. Hauser, Director
Office of Multilateral Affairs
Responsible for encouraging and monitoring bi- and multilateral agreements, including telecommunications interconnection agreements and GATT codes.

Marjorie Searing, Director
Office of International Sector Policy
Responsible for concerns relating to electronics trade.

James R. Philips, Director
Office of Major Projects
Responsible for trade projects including a project for assisting primary contractors of telecommunications systems to successfully bid for tenders by government PTTs and developing countries.

Lawrence Brady
Assistant Secretary for Trade Administration
Responsible for export administration policy, including U.S. export control policy.

Vincent Decain, Acting Deputy Assistant Secretary for
Export Administration
First level responsibility for U.S. export control policies.

Office of Patents and Trademarks

Gerald Mossinghoff
Commissioner for Patents and Trademarks
Patent and Trademark Office
Washington, D.C. 20231

OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE
Winder Building
600 17th Street, N.W.
Washington, D.C. 20506

Ambassador William E. Brock
United States Trade Representative
Responsible for coordinating the formulation of trade policy and for representing the United States in international trade negotiations.

Michael B. Smith, Deputy USTR

Geza Feketekuty, Senior Assistant for Trade Policy and Coordination
Responsible for developing and coordinating policies for trade in telecommunications equipment and services. Co-Chairs U.S. delegation to OECD Trade Committee. (See Ch. V.)

Douglas Newkirk, Assistant USTR for GATT Affairs
Responsible for coordinating U.S. activity in GATT, including Code implementation.

Harvey Bale, Assistant USTR for Investment Affairs
Responsible for coordinating U.S. international investment policy and negotiating bilateral investment treaties.

UNITED STATES INTERNATIONAL TRADE COMMISSION
701 E Street, N.W.
Washington, D.C. 20436

Alfred E. Eckes, Jr., Chairman
Has broad powers to investigate the customs law of the United States and foreign countries; the volume of importation in comparison with domestic production and consumption; the conditions, causes, and effects relating to competition of foreign industries with those of the United States; and other factors affecting competition between U.S. and imported articles.

DEPARTMENT OF DEFENSE
Washington, D.C. 20305

Lt. General William J. Hilsman, Director
Defense Communications Agency and
National Communications System
Responsible for policy development and operation of the Defense Department's worldwide telecommunications system.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

EXECUTIVE OFFICE OF THE PRESIDENT (EOP)
Old Executive Office Building
Washington, D.C. 20500

George A. Keyworth, II, Science Advisor to the President and Director, Office of Science and Technology Policy (OSTP)

Ronald B. Frankum, Deputy Science Advisor to the President and Deputy Director, Office of Science and Technology Policy
Responsible for OSTP's participation in telecommunications policy.

William P. Clark, Jr., Assistant to the President for National Security Affairs, National Security Council
Responsible for monitoring telecommunications policy from national security perspective.

BOARD FOR INTERNATIONAL BROADCASTING (BIB)
Suite 1100
1201 Connecticut Avenue, N.W.
Washington, D.C. 20036

Walter R. Roberts, Executive Director
Responsible for the daily programmatic, technical, and financial oversight of Radio Free Europe, Radio-Liberty, Inc., a private corporation that broadcasts to Eastern Europe and Russia in 21 languages.

UNITED STATES INFORMATION AGENCY (USIA)
400 C Street, S.W.
Washington, D.C. 20547

Dr. W. Scott Thompson, Associate Director for Programs
Responsible for telecommunications and information policy within USIA.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)
400 Maryland Avenue, S.W.
Washington, D.C. 20546

Harold Kimball, Director
Communications and Data Systems Division
Represents NASA in interagency telecommunications groups.

OFFICE OF MANAGEMENT AND BUDGET (OMB)
New Executive Office Building
Washington, D.C. 20503

Christopher Demuth, Administrator
Office of Information and Regulatory Affairs

Robert Bedell, Deputy Administrator
Responsible for regulatory policy, paper work reduction, and information policy.

U.S. DEPARTMENT OF TREASURY
15th Street and Pennsylvania Avenue, N.W.
Washington, D.C. 20220

U.S. Customs Service
1301 Constitution Avenue, N.W.
Washington, D.C. 20229

William von Raab, Commissioner of Customs
Collects the revenue from imports and enforces customs and related laws. Administers the Tariff Act of 1930 (see Ch. V) and other customs laws. Responsible for international copyright, patent, and trademark enforcement quotas and marketing requirements for imported merchandise.

EXPORT-IMPORT BANK
Washington, D.C.

William H. Draper, III, President and Chairman
Aids in financing exports of U.S. goods and services, including direct lending or the issuance of guarantees and insurance.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

Legislative Branch

GENERAL ACCOUNTING OFFICE (GAO)
441 G Street, N.W.
Washington, D.C. 20548

Warren G. Reed, Director
Mission Analysis and Systems Acquisition Division
Responsible for audits of international and national security telecommunications functions of the Executive Branch.

T. Dexter Peach, Director
Resources, Community, and Economic Development Division
Responsible for audit of FCC and Executive Branch spectrum, and regulatory functions generally.

CONGRESSIONAL RESEARCH SERVICE (CRS)
Library of Congress
Madison Building
Washington, D.C. 20540

Honorable Gilbert Gude, Director
Does research and analysis of Congress. Several sections are concerned with aspects of international telecommunications policy.

OFFICE OF TECHNOLOGY ASSESSMENT (OTA)
600 Pennsylvania Avenue, S.E.
Washington, D.C. 20510

John H. Gibbons, Director
Does long range studies for Congress on the policy aspects of scientific and technological subjects, including telecommunications. Recently has done reports on the 1979 WARC and on UNISPACE 1982.

COPYRIGHT OFFICE
Library of Congress
Madison Building
Washington, D.C. 20559

David Ladd, Register of Copyright
Lewis I. Flacks, International Copyright Officer
Registers copyrights and monitors and develops copyright policy, including representation of the United States at international copyright meetings.

COPYRIGHT ROYALTY TRIBUNAL (CRT)
1111 20th Street, N.W.
Washington, D.C. 20036

Edward W. Ray, Chairman
Makes formulas for distribution of, and distributes, royalties collected by the copyright office from certain categories of commercial users of copyrightable works. Cable television stations simultaneously rebroadcasting programs carried on ordinary broadcast signals are required to pay royalties to originating stations through the CRT.

SENATE COMMITTEES

Committee on Appropriations
S 128 Capitol
Washington, D.C. 20510

Mark O. Hatfield (OR-R.), Chairman
William Proximire (WI-D.), Ranking Minority Member
Timothy Keeney, Professional Staff Member

Has jurisdiction over NTIA appropriation. Interested in international telecommunications policy as decided in international fora and in its impact on the United States.

Committee on Banking, Housing and Urban Affairs
SD534
Washington, D.C. 20510

Jake Garn (UT-R.), Chairman
William Proxmire (WI-D.), Ranking Minority Member
M. Danny Wall, Staff Director

Subcommittee on International Finance and Monetary Policy
SD534
Washington, D.C. 20510

John Heinz (PA-R.), Chairman
William Proximire (WI-D.), Ranking Minority Member
Lamar Smith, Chief Economist
Paul Freedenberg, International Finance Economist

Develops monetary policy export controls, open markets, competitive pricing, and financing American exports. Oversees Office of USTR.

Committee on Commerce, Science and Transportation
SD508
Washington, D.C. 20510

Bob Packwood (OR-R.), Chairman
Ernest F. Hollings (SC-D.), Ranking Minority Member
Anne Cantrel, Staff Director
Bill Diefenderfer, Chief Counsel

Subcommittee on Communications
SR146
Washington, D.C. 20510

Barry Goldwater (AZ-R.), Chairman
Ernest F. Hollings (SC-D.), Ranking Minority Member
Ward White, Senior Counsel

Interested in Telecommunications policy generally, and plans to introduce international telecommunications legislation in 98th Congress.

Committee on Foreign Relations
Room SD - 440
Washington, D.C. 20510

Charles H. Percy (IL-R.), Chairman
Claiborne Pell (RI-D.), Ranking Minority Member
Edward G. Sanders, Staff Director
David Keaney, Chief Clerk

Has authority to ratify treaties, including Final Acts of WARCs, RARCs, and the International Telecommunication Convention.

Subcommittee on Arms Control, Oceans,
International Operations, and Environment
SD423
Washington, D.C. 20510

Larry Pressler (SD-R.), Chairman
Alan Cranston (CA-D.), Ranking Minority Member
Robert Bell, Professional Staff Member

Develops policy on the use, development, and exploitation of space; and oversees USAI activities, foreign broadcasting activities, U.S. participation in the UN, and other international organizations.

Committee on the Judiciary
Room SD-224
Washington, D.C. 20510

Strom Thurmond (SC-R.), Chairman
Joseph R. Biden, Jr. (DE-D.), Ranking Minority Member
Vinton DeVane Lide, Staff Director and Chief Counsel

Subcommittee on Patents, Trademarks and Copyrights
Room SR-198
Russell Senate Office Building
Washington, D.C. 20510

Charles McC Mathias, Jr. (MD-R.), Chairman
Howard Metzenbaum (OH-D.), Ranking Minority Member
Ralph Oman, Chief Counsel
Steve Metalitz, Staff Director

Will review cable copyright, trademark counterfeiting, home recording, computer chip protection, patent term restoration, international dumping, and other trade issues during the course of its activities in the 98th Congress.

HOUSE OF REPRESENTATIVES COMMITTEES

Committee on Energy and Commerce
2125 Rayburn House Office Building
Washington, D.C. 20515

John D. Dingell (MI-D.), Chairman
James T. Broyhill (NC-R.), Ranking Minority Member
Frank M. Potter, Jr., Chief Counsel
and Staff Director

Subcommittee on Telecommunications, Consumer Protection, and Finance
B33 Rayburn House Office Building
Washington, D.C. 20515

Timothy E. Wirth (CO-D.), Chairman
Matthew J. Rinaldo (NJ-R.), Ranking Minority Member
David Aylward, Chief Counsel and Staff Director
David Leach, Telecommunications Policy Analyst

Interested in telecommunications policy generally, and plans to introduce international communications legislation in 98th Congress.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

Committee on Foreign Affairs
2170 Rayburn House Office Building
Washington, D.C. 20515

Clement Zablocki (WI-D.), Chairman
William S. Broomfield (MI-R.), Ranking Minority Member
John J. Brady, Jr., Chief of Staff

Subcommittee on International Operations
B-358 Rayburn House Office Building
Washington, D.C. 20515

Dante B. Fascell (FL-D.), Chairman
Benjamin Gilman (NY-R.), Ranking Minority Member
Virginia M. Schlundt, Staff Director

Concerned with organization of U.S. government regarding international telecommunications policy, and with other international telecommunications issues.

Subcommittee on International Economic Policy and Trade
Annex I, House Office Building
Room 702
Washington, D.C. 20515

Don Bonker (WA-D.), Chairman
Toby Roth (WI-R.), Ranking Minority Member
Roger Majak, Staff Director

Concerned with amending the Foreign Corrupt Practices Act and in renewing the Export Administration Act.

Subcommittee on International Security and Scientific Affairs
2103 Rayburn House Office Building
Washington, D.C. 20515

Clement J. Zablocki (WI-D.), Chairman
William S. Broomfield (MI-R.), Ranking Minority Member
Ivo Joseph Spatalin, Staff Director

Concerned with scientific developments affecting foreign policy and foreign intelligence.

Committee on Government Operations
2157 Rayburn House Office Building
Washington, D.C. 20515

Jack Brooks (TX-D.), Chairman
Frank Horton (NY-R.), Ranking Minority Member
William M. Jones, General Counsel
John E. Moore, Staff Director

Subcommittee on Government Information, Justice, and Agriculture
B349-C Rayburn House Office Building
Washington, D.C. 20515

Glenn English (OK-D.), Chairman
Thomas N. Kindness (OH-R.), Ranking Minority Member
William G. Lawrence, Chief Counsel
Robert Gellman, Counsel

Has reintroduced International Communications Reorganization Act in 98th Congress. Also, interested in reciprocity of telecommunications goods and services and overseeing government operations regarding economy and efficiency.

Committee on the Judiciary
2137 Rayburn House Office Building
Washington, D.C. 20515

Peter W. Rodino (NJ-D.), Chairman
Hamilton Fish, Jr. (NY-R.), Ranking Minority Member
Alan Parker, General Counsel
Garner J. Cline, Staff Director

Subcommittee on Courts, Civil Liberties, and the Administration of Justice
2137 Rayburn House Office Building
Washington, D.C. 20515

Robert Kastenmeier (WI-D.), Chairman
Carlos J. Morehead (CA-R.), Ranking Minority Member
Michael V. Remmington, Chief Counsel

Has jurisdiction over patents, trademarks, and copyrights. Expects to review issues such as off-air taping, home taping, and cable royalty rates.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

Committee on Science and Technology
2321 Rayburn House Office Building
Washington, D.C. 20515

Don Fuqua (FL-D.), Chairman
Larry Winn, Jr. (KS-R.), Ranking Minority Member
Dr. Jesse Poore, Executive Director

Subcommittee on Science, Research, and Technology
2319 Rayburn House Office Building
Washington, D.C. 20515

Doug Walgren (PA-D.), Chairman
Judd Gregg (NH-R.), Ranking Minority Member
Dr. Thomas R. Kramer, Staff Director

Interested in transfer of electronic technologies to developing countries.

Subcommittee on Space, Science and Application
2324 Rayburn House Office Building
Washington, D.C. 20515

Harold L. Volkner (MO-D.), Chairman
Manuel Lujan, Jr. (NM-R.), Ranking Mniority Member
Darrell R. Branscome, Staff Director

Jurisdiction over National Aeronautics and Space Administration; space communications; remote earth sensing.

BIBLIOGRAPHY

General Reference Works In Telecommunications and Information Policy

Books and Articles

Bevans, Charles I. Treaties and Other International Agreements of the United States of America, 1776-1949 (Bevans).

Comptroller General. FEC Needs to Monitor a Changing International Telecommunications Market. Government Accounting Office 83-95, Washington, D.C. March 14, 1983, 46 pp. Finds considerable disagreement among the telecommunications carriers and others as to whether decisions reached by the FCC and Congress will actually increase market competition. Determined that the FEC should monitor market behavior to ensure that its decisions are having the desired effects.

Dizard, Wilson P. The Coming Information Age. Longman, New York. 1982. 213 pp. Focuses on U.S. ideas and actions in the computer and telecommunications industries and the need for change in the U.S. government's structure to handle competition.

Firestone, Charles M. The Third Biennial Communications Law Symposium. Resource Manual. U.C.L.A. Law School and the International Bar Association. University of California. Los Angeles. 1983. Includes materials on communications satellite technology, the international satellite and cable television marketplace, international regulation of satellite broadcasting, DBS between United States and Canada, and signal reception issues. Bibliography.

Frieden, Robert M. "International Telecommunications and the Federal Communications Commission," Vol. 21 Columbia Journal of Transnational Law No. 3, pp. 421-482 (1983). A primer cataloguing FCC efforts to inject marketplace competition in the international telecommunications arena, including discussion on shared use and resale, removal of market and territorial service restrictions, international application of the Second Computer Inquiry, elimination of the TAT-4 voice/record dichotomy, and the Comsat Reorganization and Record Carrier Competition Act (RCCA) of 1981. This article concludes that unilateral imposition of policies that accrued state-side benefits do not necessarily foster the same gains internationally.

Ganley, Oswald H. and Gladys Ganley. To Inform or Control? The New Communications Networks. McGraw Hill Co. New York. 1982. 250 pp. Describes the growth of the U.S. communications industry and the problems it begins to face as the international marketplace develops.

Also discusses transborder data flow, WARC '79, international satellite capabilities, electronic security systems, and arms control. Contains a bibliography and list of acronyms and their meanings.

George Washington University. Center for Telecommunications Studies. Washington, D.C. Telecommunications and Information Resources. Occasional Paper No. 4. Forthcoming. This reference will describe the available collections of telecommunications materials in libraries and other information centers, and will provide information on access to these collections.

Homet, Roland S. Jr. Politics, Cultures, and Communication: European vs. American Approaches to Communications Policymaking. Aspen Institute. New York. 1979. Examines the differences between European and U.S. approaches to communications policymaking (i.e., roles of legislature and judiciary, changes to come, and amounts of control on broadcasting).

Jasentuliyana, Nandasiri and Roy S.K.Lee. Manual on Space Law. 4 Volumes. Oceana Publications, Inc. Dobbs Ferry, New York. A collection of articles, treaties, laws, and other documents and bibliography relating to outer space, including telecommunications satellites, ITU, remote sensing, and intellectual property.

Martin, James. Future Developments in Telecommunications. Second Edition. Prentice-Hall. Englewood Cliffs, New Jersey. 1977. 668 pp. A review and explanation of telecommunications technologies and their applications.

Mateesco Matte, Nicholas. Aerospace Law. Satellite Telecommunications. The Institute and Center for Space law. McGill University. Montreal, Canada. Butterworth and Co., Ltd. Toronto and Vancouver. 1982. 354 pp. A comprehensive discussion of international space law including a description of basic technology, reviews of international cooperation, telecommunications satellites and international law, the International Telecommunications Union, the commercial use of telecommunications satellites, direct broadcast satellites, piracy of program-carrying signals, and technology transfer. Contains bibliography.

Pelton, Joseph N. Global Talk. Sijthoff & Noordhoff, Alphen van den Rijn. The Netherlands. 1981. Examines the future trends in telecommunications technologies and their influence on bringing about the Global Community of tomorrow.

Pike and Fischer. Radio Regulation. First and Second Series. Bethesda, Maryland. Pike and Fischer, Inc. 1948 - present. Looseleaf. A compendium of information on telecommunications, including the Communications Act of 1934, executive orders and administrative acts, statutes, judicial review, practice and procedure, radio treaties and international regulations in force, and radio broadcast services.

Ploman, Edward W. International Law Governing Communications and Information. Greenwood Press. Westport, Connecticut. 1982. 367 pp. A collection of significant treaties and agreements on a variety of subjects including general international law, information law, telecommunications law, postal law, space law, intellectual property rights, informatics law, trade and customs regulation, culture and education, and law enforcement and national security.

President's Task Force on Communications Policy. (Eugene V. Rostow, Chairman) Final Report. August 14, 1968. GPO. Washington, D.C. A historically significant study of the legal and economic structure of the U.S. telecommunications systems and policy considerations to guide its evolution domestically and internationally.

Shepard's United States Administrative Citations. Colorado Springs. Shepard's/McGraw-Hill. 1983. Contains FCC citations by docket number and a concordance to Federal Communications Commission Reports and Pike and Fisher.

Sterling, Christopher H. Foreign and International Communications: A Survey Bibliography. Washington: George Washington University Center for Telecommunications Studies. Occasional Paper No. 3, August 1983. Third in a series of regularly revised annotated and subject-divided guides to current books and documents.

United Nations Committee on the Peaceful Uses of Outer Space. Report of the Second UN Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE '82). Vienna, Austria. August 9 to 21, 1982. Recommendations, pp. 1-5. Describes the development of satellite technology, the significant applications of satellite systems and their usefulness to developing countries contemplating the development of national communications systems, remote sensing, planning for the geostationary orbit and the radio frequency spectrum, and the role of international and regional satellite organizations.

United Nations Treaty Series (UNTS). 1946/47 to present. United Nations. New York, New York. Treaties of the United Nations, indexes, and cumulative index. Supercedes treaty series ISSN 0379-8267, issued by the League of Nations.

U.S. Federal Communications Commission. Federal Communications Reports. First and Second Editions. Washington, D.C. Government Printing Office. Official published versions of FCC decisions, notices of inquiry and proposed rulemakings, and orders.

U.S. Department of State. Executive Agreement Series. Isssued singly in pamphlets until replaced in 1945 by TIAS. Official version of the executive agreements prior to 1945.

U.S. Department of State. Treaties and Other International Acts Series. (TIAS) Issued singly in pamphlets. Official version of all agreements to which the United States is a signatory. Prior to the publication of this compilation, treaties and other international agreements were printed in the U.S. Statutes at Large.

U.S. Department of State. Treaties in Force. A List of Treaties and Other International Agreements of the United States in Force on January 1, 1983. Washington, D.C. GPO. Contains a list of treaties and other international agreements to which the United States is a party and which are carried on the records of the Department of State as being in force on January 1, 1983. Includes those treaties and other agreements which on that date had not expired by their terms, been denounced by the parties, superseded by other agreements, or otherwise definitely terminated. For bilateral treaties, see reference to each country under Telecommunications, Satellite Communications Systems, Patents, Copyright, Appendix.

U.S. Department of State. Treaty Series (TS). Issued singly in pamphlets until replaced by TIAS in 1945. Official version of the treaties prior to 1945.

U.S. Department of State. United States Treaties and Other International Agreements. (UST) Published annually on calendar year basis beginning January 1, 1950. Complete versions of treaties to which the United States is a signatory.

U.S. Senate Committee on Commerce, Science & Transportation. Long-Range Goals in International Telecommunications and Information. An Outline for United States Policy. Report to the Congress of the United States. National Telecommunications and Information Administration. March 11, 1983, 98th Congress, First Session. 243 pp. plus appendices. This three-part report sets out information concerning the challenges and opportunities which the United States confronts in international telecommunications and information and some of the difficulties identified in conjunction with past U.S. policies and approaches, and provides detailed discussion of some of the key issues.

Wedemeyer, Dan. J. Proceedings. Pacific Telecommunications Conference, 1983. Pacific Telecommunications Council. Honolulu, Hawaii. 1983. A collection of papers presented at the Pacific Telecommunications Conference, January 16-19, 1983, on such subjects as business applications, national communications infrastructures, satellite and terrestrial systems, user needs in the Pacific, the geostationary arc, transborder data flow, information technology transfer, international telecommunications standards, and the information society. The focus of the conference is on Pacific territories and States.

Whiteman, Marjorie M. Digest of International Law. Department of State. Volume 9. December 1968. GPO. Chapter XVII describes significant treaties and agreements in telecommunications up to 1968,

including piracy, radio, postal, undersea cable, and telegraph agreements. Successor digest to Hackworth's Digest of International Law.

Periodicals

Broadcasting. Broadcasting Publications, Inc. Washington, D.C. Weekly. Current coverage of broadcasting industry and action of administrative agencies and courts which affect broadcasting domestically and internationally.

Chronicle of International Telecommunications. C. Robert Beecham, Publisher. Ten times a year. Features articles on all aspects of international telecommunications policy. George Washington University, Center for Telecommunications Studies. Washington, D.C.

Communications Daily. Washington, D.C. Television Digest, Inc. 1981 - present. A daily digest of major events in the telecommunications industry, as well as activities of government policy, technical and regulatory agencies, and pending legislative activity.

Communications International. A bi-weekly newsletter covering the range of international telecommunications policy issues. Dawson-Budwick Publishers. Washington, D.C.

Federal Communications Law Journal. University of California at Los Angeles Law School. Published three times a year. Includes a variety of articles on legal aspects of domestic and international telecommunications.

The Information Society. An International Journal. Joseph Becker, Editor. Quarterly. Scholarly articles on a wide variety of information-related topics, including the impacts of information technologies.

Inter Media. Journal of the International Institute of Communication. Six times a year. Features articles on all aspects of international telecommunications and information policy. IIC. London, England.

International Institute of Communication. Document Service. A monthly bulletin. Contains the texts of important documents in the field of communications and a listing of other documents received in the Washington office of IIC. Washington, D.C.

Telecommunications. Horizon House. Dedham, Massachusetts. Monthly. Includes articles on data communications, teleprocessing, and transmission.

WHERE INTERNATIONAL TELECOMMUNICATIONS POLICY IS MADE

Telecommunications Policy. Butterworth Scientific Limited. Guildford, Surrey, United Kingdom. Quarterly international journal containing articles on all aspects of assessment, control, and management of developments in telecommunications and information systems.

Telecommunications Reports. Business Research Publications, Inc. Washington, D.C. A weekly newsletter covering the telecommunications voice, record, and data service fields both domestically and internationally.

Worldwide Report. Telecommunications Policy, Research and Development. Foreign Broadcast Information Service. Weekly. Joint Publications Research Service. Arlington, Virginia. Available through NTIS, Springfield, Virginia. Contains information on telecommunications primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Foreign language materials are translated into English.

CHAPTER II

THE INTERNATIONAL TELECOMMUNICATION UNION AND THE SHAPING OF TECHNOLOGICAL DEVELOPMENTS

THE INTERNATIONAL TELECOMMUNICATION UNION AND THE SHAPING OF TECHNOLOGICAL DEVELOPMENTS

HISTORY OF THE ITU AND CURRENT DEVELOPMENTS

Anthony M. Rutkowski

Introduction

The speed of telecommunication has long been vitally important for all but the most primitive peoples on earth. It is not surprising, therefore, that shortly after the invention of the telegraph, nations met to develop permanent arrangements for allowing telecommunication systems to operate between different nations, and to harmonize the kinds of equipment and techniques used.

Those arrangements are carried out internationally through the International Telecommunication Union (ITU), a specialized agency of the United Nations (UN). The ITU provides administrative and consultative forums to develop detailed arrangements for international telecommunication, as well as various administrative bodies to implement them.

The ITU's 157 member nations currently exceed United Nations membership. In addition, scores of telecommunication system operators and manufacturers participate in many of the forums, albeit in a non-voting capacity. Most decisions of the ITU are made by consensus. This chapter describes these activities.

Jurisdiction of the ITU

The ITU is governed by the International Telecommunication Convention which is reviewed and amended at each plenipotentiary conference. Currently the Union operates under a Convention approved at the Malaga-Torremolinos Conference in 1973. The most recent Plenipotentiary Conference was held in Nairobi in November 1982. The changes made in the Convention will be effective January 1, 1984, for members ratifying it. The significant differences between the two instruments for the United States are set out below in the description of current ITU activities.

The ITU's substantive jurisdiction is not precisely defined. Certain language in the Convention sets forth the purposes of the organization in loosely delineated terms. Thus, the ITU concerns itself with telecommunication of all kinds, including telecommunication services and matters. The term "telecommunication" is broadly defined in the Convention to encompass "any transmission, emission or other reception or...intelligence of any nature by wire...or other electromagnetic systems."1/

One of the more significant current international issues concerns the matter of international organization jurisdiction over

telecommunication and information services. Although new, this issue has a profound effect on the future activities of the ITU and other organizations. Until recently, the definition of telecommunication was clear. However, computer and telecommunication technologies are rapidly merging into the more unified concept of information systems. Even the term "telecommunication" is increasingly being replaced with the phrase "information transport."

The ITU has already begun to adapt to the new environment in its routine operations by recognizing that old definitions and terms no longer fit. Institutional impediments to change will, however, forestall any formal metamorphosis of the ITU into an International Telematique Union for many years. The machinery to accomplish this end was nevertheless set in motion when the 1982 Nairobi Plenipotentiary Conference mandated a series of meetings for the period of 1984 through 1988 to "establish...a broad international regulatory framework for all existing and foreseen new telecommunication services...." 2/

The Union's substantial jurisdiction over communication and information matters is far from exclusive. Many other institutions, including the United Nations, the United Nations Educational Scientific and Cultural Organization (UNESCO), the Organization for Economic Co-operation and Development (OECD), INTELSAT, and the International Organization for Standardization (ISO) have some substantive jurisdiction in the field. These organizations not only participate in the ITU activities, but frequently compete with each other over jurisdictional boundaries and venue. Countries engaging in an international version of forum shopping abet these turf battles.

The Structure of the ITU

The ITU's basic structure has evolved as telecommunication has become more complex. Originally it had only a plenipotentiary conference and a general secretariat. In the 1920's it added a consultative committee infrastructure; in the 30's, an Administrative Conference; and in the 40's, the Administrative Council and the International Frequency Registration Board (IFRB). The plenipotentiary conference is responsible for amending the Convention, electing high officials, and determining basic policy direction. The 41 member state Administrative Council meets annually to approve the budget and make short-term policy decisions. The General Secretariat, International Frequency Registration Board (IFRB), Consultative Committee on Radio-Communication (CCIR), and Consultative Committee on Telegraph and Telephone (CCITT), IFRB, CCIR and CCITT Secretariats perform all the continuing responsibilities of the ITU and represent its interests in other international organizations.

The IFRB administers the various processes by which nations acquire control of radiocommunication frequencies, free from interference. It does not have specifc regulatory powers but can sometimes serve in a quasi-judicial capacity. The two consultative committees, CCIR and CCITT, comprise an extensive infrastructure of study groups which adopt thousands of detailed arrangements that largely control the design and operation of telecommunication systems and services throughout the world. The Administrative Conferences, World Administrative Telegraph and Telephone (WATTCs), World Administrative Radio Conferences (WARCs), and Regional Administrative Radio Conference (RARCs) perform similar functions, but in a more formal and legally binding manner.

The power of these conferences and committees to make binding recommendations may be illusory. Consultative committee actions often have an adverse economic impact on telecommunication manufacturers or system operators who refuse to abide by them. For example, a manufacturer who refuses to implement an informal CCITT standard may be precluded from selling products to countries in which the standard has legal force. The effectiveness of formal Administrative Conference actions, however, rests largely on the goodwill of individual nations.

In the past few years, the CCITT has changed dramatically from a sleepy group of old-time telegraph and telephone administrators, to an exciting, significant forum which, among other activities, is designing the intelligent global network of the future, the Integrated Services Digital Network (ISDN). Consonant with this change, the 1982 Nairobi Plenipotentiary has amended the CCITT's jurisdiction to encompass all telecommunications except radio. Thus, following ratification of the amended Convention for 1982, the terms "telegraph and telephone" will have jurisdictional significance. The CCITT now deals with digital networks, information services, teletext, and the full panoply of integrated services. As the CCITT increasingly focuses on integrated services, the CCIR may eventually be folded into it to produce a unified consultative committee.

Other minor structural changes are also possible. For some years now, the developing countries have urged the creation of a separate study group, devoted exclusively to their special problems, within the consultative committees. Critics argue, however, that developing country problems do not warrant a separate group and could be adequately considered within the existing systems-oriented structure.

The Work of the ITU

Beyond its jurisdiction and structure, the ITU has many substantive achievements. Its four basic functions are: promulgating technical and operational standards to allow efficient integration and use of systems and equipment; administering various processes whereby radio channels or orbital positions may be used by one state free from harmful interference by stations of another state; furnishing assistance to developing countries; and information handling.

The first and last functions originated with the ITU and its Bern Bureau. 3/ The second appeared during the first two decades of this century and grew out of the necessity to apportion a technology-limited international resource among sovereigns. 4/ The third was added in the 1950's as a result of UN development assistance efforts and the ITU's assuming the task of assisting developing countries. 5/

Orbital Allotments and Frequency Allocations

The ITU's most controversial function reflects a long history of contention over the equity of the various rights vesting schemes and the reluctance of sovereign nations to relinquish power. It is not surprising that not all claimants of shared resources are content with decisions that concern them. To avoid causing harmful interference to another country's radio stations, each state conforms to a general scheme which determines its right to use radio channels or orbital positions. The plan encompasses three different mechanisms, depending on the kind of radio service and frequency bands at issue. These are: registering with the ITU on an as-needed basis and utilizing the IFRB as a recorder of notifications and fact-finder in case of conflict; planning a list which divides the available resource among nations at a conference; and coordinating on a bilateral basis.

The first of these approaches has been advocated for 75 years and used by nearly all nations, both internally and internationally. On a domestic level, the notice and recordation policy is often coupled with a stipulation of limited grant periods and procedure for adjudicating among competing applicants. Although this is the more equitable procedure, sovereignty makes it nearly impossible on the international level. Most nations have been unwilling to allow an international body to adjudicate whether they can utilize a radio channel or satellite position.

The ITU's International Frequency Registration Board (IFRB) was originally conceived as a quasi-judicial body, but it has never been given that authority. More recent International Telecommunication Convention provisions suggest that the grant periods for satellite positions are for a limited duration. However, the indefinite character of the provisions, coupled with economic and political realities, limit the IFRB's competence to enforce the limitation. As a result, whenever the restriction on radio channels or satellite positions becomes contentious, the usual recourse is planning. Although numerous contemporary commentators view this tendency toward planning as recent, it has been utilized for radio frequency allocations since the turn of the century. 6/

Notwithstanding their defects, these mechanisms are more efficient than requiring each nation to enter into bilateral agreements with every other nation. The ITU's efforts in allotment and allocation have achieved important results, including establishing lines of communication

among all nations and encouraging countries to conform to internationally approved norms in order to reduce the potential for harmful interference to radiocommunication.

Promulgation of Technical and Operational Standards

This function is the most likely to be affected by new developments. The ITU is a mechanism for bringing together the nations' telecommunication system operators and the equipment manufacturers of the world, in order to adopt an impressive array of technical and operating standards. These include: accounting rates and collection charges for various international telecommunication services, system interface specifications, plans for regional and global networks, the technical characteristics of signals and emissions, and the allocation of the radio spectrum to various radio services. The thousands of principles and standards adopted allow telecommunication systems around the globe to operate as a relatively integrated system, in harmony with each other.

These standards have an important impact on international trade and economics. Certain operational requirements or specifications can significantly affect competition in particular geographical areas if, for example, they determine the size of markets for electronic equipment, or constrain information flows. 7/

The ITU conferences benefit all nations. The adoption of one multilateral agreement, rather than numerous bilateral ones, saves administrative costs. Additionally, by operating from a base of neutrality, the ITU meetings provide an atmosphere conducive for conciliation and increase the opportunity for common agreement among several nations. The large exporters of communication equipment and services benefit especially from the ITU's ability to foster common global provisions. When they adopt internationally recognized standards, the economies of scale achieved by production for a domestic market can then be applied to the world market. Thus, importing nations can also profit from these economies.

Although basic ITU procedures are unlikely to change, a reconsideration of the method of presentation of standards proposals would benefit ITU members substantially. The most beneficial development would be the eventual merger of all telecommunication principles and standards into one comprehensive, codified instrument, under the aegis of a single legislative organ.

Development Assistance

The ITU's development assistance activities presently consist of: managing United Nations Development Program (UNDP) projects for telecommunication systems and training; maintaining a fellowship

program that allows candidates in industralized countries to obtain training; and offering administrative assistance to developing countries by conducting seminars, studies, and training programs. Constant pressure to expand these activities should result in continued growth in this area in the future.

Information Handling

The ITU's information handling function consumes a substantial part of its financial and manpower resources. It is the least likely of all activities to vary, as it has not undergone change for the past 115 years. Only a public international organization can perform this task effectively. The ITU receives vast amounts of information concerning many specialized facets of telecommunication. It edits, sorts, stores, and disseminates this data throughout the world in a variety of circulars, lists, periodicals, and books. Much of it is highly specialized and used for operating and overseeing the world's telecommunication systems by people performing relatively disparate administrative tasks in government agencies and telecommunication companies.

The Union currently produces 777,000 copies of 466 publications. These include: general periodicals, such as the Telecommunication Journal and Teleclippings; a yearbook with various telecommunication statistics; lists of international telephone routes, coast and ship stations, call signs, radiodetermination, and special service and monitoring stations; and circulars notifying administrations of official document filings with the ITU by other nations. The ITU also reproduces and handles 7.8 million conference documents as part of its support services for the hundreds of international telecommunication conferences and meetings which occur every year in Geneva.

As part of its information handling activities, the ITU provides translation and interpretation services. All publications are furnished in French, English, and Spanish. In addition, all meetings and correspondence may be conducted in up to five official languages and Arabic. This requires a relatively large and specialized staff, capable of understanding and expressing communication idioms in a multiplicity of languages.

The ITU also maintains a central library and documentation center which serves as a repository for all official international documents concerning ITU matters and conferences and for the world's most extensive collection of treatises, periodicals, and monographs concerning communication. As such, it represents a unique international resource for governments, scholars, and private corporations.

THE INTERNATIONAL TELECOMMUNICATION UNION AND THE SHAPING OF TECHNOLOGICAL DEVELOPMENTS

International Telecommunications and the ITU Today

Although the United States clearly dominates in influencing the field of international telecommunication, its ability to affect the activities of an international organization such as the ITU is limited. Any organization of 157 sovereign members that deals with a subject as basic to societal activity as telecommunication must accomodate the views of all nations. More importantly, other initiatives are directing the evolution and work of the ITU. 8/

Three major developments currently dominate international telecommunication and will continue to do so for an indefinte period. The first is the integration of most telecommunication and information systems into a vast, dynamic network, known as the Integrated Services Digital Network (ISDN). Its implementation will evolve during the next two decades, although key planning decisions and facility designs are being devised today.

The second major development, occurring at the telecommunication facility level, involves a myriad of technological innovations in every field. These include: terminals possessing artificial intelligence, voice synthesis and recognition capabilities, and less expensive mass storage; digital transmission and switching telecommunications facilities; extremely high capacity optical fibres; microprocessor-controlled transmitters and receivers; various processing and multiple access techniques, including the spread spectrum; broadband amplifiers and antennas; and space platforms and shuttles. The latter major category complements the first.

The third major development concerns the use by developing countries of international institutions to secure compensatory advantages. These assume a wide variety of forms and descriptions such as the "New World Communications and Information Order," "development assistance," "equitable access," and "appropriate technology." They also involve such disparate matters as contributory formulations, access to information, study programs, arrangements for protecting radio stations from interference, staffing, and the implementation of telecommunication facilities.

The issues before the ITU today arise out of a worldwide response to these three major areas. They are leading to certain modifications to the ITU's jurisdiction, structure, and products. The most that the United States or any other country can do is to attempt to shape this global response in a manner that meets perceived interests.

Conclusion

There is little doubt that the ITU has an important and growing role to play in the future of communications. The questions, however, are how much and what kind of a role it will play. The answers lie in

the decisions that will be rendered in the crucial conferences held over the next decade.

The activities and developments noted above broadly portray the direction of the ITU. Changes are occurring as a result of fundamental communications developments and are largely beyond the influence of any individual nation. In the course of numerous ITU fora, however, the United States has a continuing obligation to attempt to affect these variations in terms of its own interests as well as those of other ITU members. 9/

FOOTNOTES

1. The International Telecommunication Convention, Malaga-Torremolinos, Spain, 1973. 28 UST 2495, TIAS No. 8572 at 2644.

2. Resolution PLA/1, International Telecommunication Convention, Nairobi, 1982.

3. The Telegraph Union was created at the Paris Conference in 1865, and the Convention and Regulations came into effect on January 1, 1866. In 1868, at the Vienna Telegraph Conference, the Bern Bureau was established to carry on the continuing administrative functions of the Union. See Ch. I, G.A. Codding & A.M. Rutkowski, The ITU in a Changing World (1982). Dedham, Massachusetts. Artech House. 1982.

4. The first manifestation of this function was Art. IV of the Final Protocol of the Berlin Preliminary Radio Conference of 1903, which required that: "[w]ireless telegraph stations should operate, as far as possible, in such a manner as not to interfere with the working of other stations." Three years later, at the Berlin Radiotelegraph Conference, a provision was added which established an international notice scheme through the Bern Bureau. See Art. 2, Berlin Radiotelegraph Regulations (1906). For a more detailed discussion of this scheme and its evolution over the years, see Codding & Rutkowski, supra at 249-251, 257-274.

5. See Art. 4.2 ¶ 24, International Telecommunication Convention, Geneva, 1959.

6. See Codding and Rutkowski, The International Telecommunication Union and a Changing Environment, Ch. II, pp. 245-282.

7. E.g., the first radiotelegraph conference at Berlin in 1903 was called to adopt standards to eliminate Marconi's restrictive agreements with the operators of its equipment. See F.C. deWolf, International Control of Radio Communication. Dept. of State Bulletin XII (Jan. 28, 1945) at 134. More recently, the adoption of CCIR color television standards provided a fertile forum for defining markets. See R. Crane, The Politics of International Standards. Ablex Publishing Corp. (1979).

8. For additional information on U.S. policies toward the ITU, see Rutkowski, "The USA and the ITU: Many Attitudes, Few Policies," 10 Inter Media 33 (No. 4/5, July/Sept. 1982).

9. Resolution PLA/1, International Telecommunication Convention, Nairobi 1982. The acronyms WATTC and CCITT stand for "World Administrative Telegraph and Telephone Conference," and for "International Consultative Committee on Telegraph and Telephone," respectively.

UNITED STATES LAWS AND REGULATIONS

U.S. Senate Resolution 97-21. Ratification of Radio Regulations (World Administrative Radio Conference, Geneva, 1979) and Final Protocol. Senate has given advice and consent. Currently awaiting Presidential signature.

COURT DECISIONS AND ADMINISTRATIVE ACTIONS

FCC Proceedings

World Administrative Radio Conferences (WARCs)

Mobile Services. Relates to preparation for an ITU WARC for Mobile Services. R. and O. Gen. Doc. No. 80-184, F.C.C. Doc. No. 82-284, 31562. Adopted June 23, 1982; released July 2, 1982. Informs the public on the agenda, venue, and length of the 1983 ITU WARC for Mobile Telecommunications, and presents the U.S. proposals which the FCC forwarded to the Department of State with the request that they be utilized as the basis for formal U.S. input to that WARC. Provides history of proceeding including four Notices of Inquiry (NOIs). Terminates proceeding.

Planning of the High Frequency Bands Allocated to the Broadcasting Service (Shortwave Broadcasting). NOI. Gen. Doc. No. 82-165, F.C.C. Doc. No. 82-140. Adopted March 25, 1982; released March 31, 1982. FCC requests comments on a number of issues including: willful, harmful interference (jamming) conducted by administrations signatory to the Final Acts of the 1979 WARC; the use of high power transmitters for improved reception in international target areas; appropriate radio frequencies required to assure a given reliability of service; and other technical issues. The development of planning methods and principles and the system of notification to the International Frequency Regulation Board (IFRB) of broadcasting requirements are also issues in this NOI.

Planning of the High Frequency Bands Allocated to the Broadcasting Service (Shortwave Broadcasting). F.C.C. Doc. No. 82-165. WARC in 1983 and 1986. First report expected April 1983. Docket remains open.

Space WARC. Inquiry Relating to Preparation for an ITU WARC on the Use of the Geostationary-Satellite Orbit and the Planning of the Space Services Utilizing It. Gen. Doc. No. 80-741, F.C.C. Doc. No. 80-697. Adopted November 25, 1980. Requests public comment on preparations for this WARC (currently scheduled to be held in 1985 and 1988). Basic question to be addressed is the means to be employed for regulating access to a limited resource, the geostationary-satellite orbit/spectrum used for radio communication.

Space WARC. Same title. Gen. Doc. No. 80-741, F.C.C. Doc. No. 82-214. Adopted May 13, 1982. Sets out an outline of issues to be

articulated in preparation for the 1985 Space WARC. States U.S. objectives and philosophy. Contains a summary of comments on the NOI, 80-697, the guidelines for U.S. preparation for the Space WARC, and other WARC-related information.

Amendment of Part 2 of the Commission's Rules Regarding Implementation of the Final Acts of the World Administrative Radio Conference, Geneva, 1979. Gen. Doc. No. 80-739, F.C.C. Doc. No. 82-508. Adopted Nov. 18, 1982. Notice of Proposed Rulemaking (NPRM) implements Part 2 of the FCC's Rules and Regulations regarding the Final Acts of the 1979 WARC. This is necessary because the Final Acts of the WARC became effective internationally on January 1, 1982, for administrations which have ratified the treaty. The Final Acts become law in this country upon ratification by the United States. This NPRM includes the issues set out in 4 previous NOIs on which public comments were solicited. (F.C.C. Doc. No. 80-695, 46 Fed. Reg. 3060; F.C.C. Doc. No. 81-247, 46 Fed. Reg. 31693; F.C.C. Doc. No. 81-323, 46 Fed. Reg. 40536; F.C.C. Doc. No. 81-457, 46 Fed. Reg. 60221.) All reply comments to be submitted before April 11, 1983.

Regional Administrative Radio Conferences (RARCs)

Direct Broadcast Satellite (Domestic DBS). Relates to preparations for the 1983 Region 2 RARC of the ITU for the Planning of the Broadcasting-Satellite Service in the 12 GHz Band and the Associated Uplinks. Gen. Doc. No. 80-398, F.C.C. Doc. No. 82-139, 30976. Adopted March 25, 1982; released April 20, 1982. See also ERRATA, same title, released April 23, 1982. NPRM. Requests public comment concerning Commission preparations for a scheduled RARC for Region 2 for planning of the 12 GHz broadcasting satellite service. Since second NOI, ITU has adopted a resolution containing a definitive agenda for this RARC and establishing an international panel of experts to examine planning methods for the Broadcast Satellite Service.

Direct Broadcast Satellite (Domestic DBS). Relates to U.S. objectives and proposals for the 1983 Region 2 RARC on Planning the Broadcasting-Satellite Service. Gen. Doc. No. 80-398, F.C.C. Doc. No. 83-102. March 9, 1983. R. and O. Adoption of proposals for the RARC will occur when it convenes in Geneva, Switzerland, on June 13, 1983. FCC states concern that plan and procedures for coordination and sharing allow for use of initial or interim systems that may assume a different form from those appearing in the plan, which would help expedite service within United States and elsewhere in the Region. A related concern is to assure that such initial systems not be designed, developed, or managed so as to impede the smooth and timely transition to the plan. The FCC makes several technical recommendations based on these concerns.

SIGNIFICANT TREATIES AND AGREEMENTS

International Telecommunication Convention, Final Acts of the International Telecommunication Union (ITU) Plenipotentiary Conference. Done at Malaga-Torremolinos, Spain, October 25, 1973. 28 UST 2495, TIAS No. 8572. Entered into force for the United tates, April 7, 1976. (At each Plenipotentiary Conference the Convention is re-adopted with updating amendments. It must then be ratified by the ITU Member States. A new Convention, adopted in Nairobi, Kenya, in October 1982, will enter into force January 1, 1984, for those countries that have ratified it.)

Location and membership of ITU. Permanent seat in Geneva, Switzerland. Members are countries ratifying or acceding to Convention that are entitled to participate in ITU conferences, to be elected to office, to nominate others for office, and to vote at all meetings and on written consultations. (Arts. 1, 2, 3)

Purpose. To provide a mandate for ITU: (a) to maintain and extend international cooperation for the improvement and rational use of telecommunications of all kinds; (b) to promote the development of technical facilities and their most efficient operation with a view to improving efficiency of telecommunications services, increasing their usefulness and making them, so far as possible, generally available to the public; and (c) to harmonize the actions of nations in the attainment of those ends. (Art. 4)

Structure.

a. Establishes ITU structure as composed of certain organs:

1) The Plenipotentiary Conference. The supreme organ of the ITU, composed of delegations representing members and convened at regular intervals, normally every 5 years. The Plenipotentiary Conference determines general ITU policy, considers the activities within the ITU since the previous Conference, establishes financial and budget criteria for the ITU and its employees, elects officials to appropriate bodies within ITU, revises the Convention, concludes agreements between the ITU and other entities, and deals with other telecommunication questions as necessary. (Art. 6)

2) Administrative Conferences. These comprise World Administrative Radio Conferences (WARCs), World Administrative Telegraph and Telephone Conferences (WATTCs), Regional Administrative Radio Conferences (RARCs), and Regional Administrative Telegraph and Telephone Conferences (RATTCs). WARCs are authorized to discuss specific

telecommunication matters, such as partial or, occasionally, total revision of Administrative Regulations (Radio Regulations, Telephone, and Telegraph Regulations); RARCs are authorized to discuss only questions of a regional nature, such as instructions to the International Frequency Regulation Board (IFRB). (Art. 7)

3) Administrative Council. A 36-member body elected by the Plenipotentiary Conference with regard to equitable geographic distribution. The Council acts for the Plenipotentiary Conference between meetings, takes steps to facilitate implementation of the Convention, ensures efficient coordination of the work of the ITU and exercises financial control over the permanent organs of the ITU. It is specifically mandated to promote international cooperation for provision of technical cooperation to developing countries. (Art. 8)

b. Establishes permanent organs of the ITU as:

1) General Secretariat. Directed by a Secretary-General and a Deputy Secretary-General who take actions required to ensure economic use of the ITU's resources, as instructed by the Administrative Council. (Art. 9)

2) International Frequency Registration Board (IFRB). Five independent members, elected with consideration for equitable geographic distribution, who are considered custodians of an international public trust. Their principal functions are to record frequency and geostationary satellite orbital assignments made by different countries in order to ensure international recognition of these assignments. (Art. 10)

3) International Consultative Committees - International Consultative Committee on Telegraph and Telephone (CCITT), and the International Consultative Committee on Radio (CCIR). Mandated to study technical, operating, and, in the case of the CCITT, tariff questions relating to radio, telephony, and telegraphy, and to issue recommendations, with particular focus on establishing, developing, and improving telecommunication in developing countries. Each CCI is required to work through a Plenary Assembly, study groups, and a Director elected by the Plenary Assembly. (When the 1982 Convention of Nairobi enters into force, the Directors will be elected by the Plenipotentiary Conference). (Art. 11)

Financing. There is a class-unit system for the payment of contributions by member states for financing the ITU. Members who are two years in arrears lose voting rights. (Art. 15)

Substantive provisions. Directed at maintaining an efficient worldwide telecommunication network, establishing agreements to provide channels for carriage of international messages, and maintaining them at current technical levels. Recognizes right of public to use the network; need for secrecy of messages; and priority for safety-related or certain epidemiological messages. (Arts. 18, 22.1, 23, 24, 25, 26, 27)

Substantive restrictions. Directed at granting members: right to stop transmission of any private telecommunications which are against a State's law or violate its security; right to suspend service indefinitely; and right to refuse responsibility to users of international telecommunication network, especially regarding claims for damages. (Arts. 19, 20, 21, 22, 23)

Special provisions for radio. Places limits on the number of radio frequencies and the spectrum space used: to limit them to that which is essential; to apply latest technical advances as soon as possible; to permit equitable access according to each country's needs to geostationary orbit and radio frequencies; to operate radio stations to avoid harmful interference with another country's radio services or stations; to exchange communications among all mobile radio services; to give priority to distress messages. (Arts. 33-38). (When the 1982 Convention enters into force on January 1, 1984, it will require Members to take into account the special needs of the developing countries and the geographical situation of certain unnamed countries.)

Annexes: 1) List of Member States; 2) List of definitions of terms used in Convention and Regulations; 3) The 1947 agreement with the United Nations making the ITU a Specialized Agency.

The Final Acts of the World Administrative Telegraph and Telephone Conference. Done at Geneva, Switzerland, April 11, 1973. 28 UST 3293, TIAS No. 8586. Telegraph Regulations. Telephone Regulations. (Most recently ratified Telegraph and Telephone Regulations.) Entered into force for the United States April 21, 1976.

The telegraph regulations and the telephone regulations, separate documents which lay down the general principles to be observed in international telegraph and telephone services, are amended at each WATTC, as well as at the ITU Plenipotentiary Conferences. They require both governments and Registered Private Operating Agencies (RPOAs) to comply with CCITT recommendations. The regulations apply regardless of means of transmission used. They also set out technical requirements, descriptions of services offered to users, rules concerning tariffs, and definitions of terms.

Final Acts of the WARC, Geneva, 1979. Radio Regulations. (Most recently ratified Radio Regulations became effective January 1, 1982, for those members ratifying, except for certain provisions which have different ratification dates.) Done at Geneva, Switzerland, September 24 - December 6, 1979. U.S. Department of State, Office of International Communications Policy, TD Serial No. 116. The United States has not yet ratified the regulations appended to the Final Acts of the 1979 WARC (but see S. Res. 97-21, above).

The radio regulations, which lay down the general principles to be observed in international radiocommunications, are amended at each WARC and at ITU Plenipotentiary Conferences. They address topics such as technical standards, terminology, measures against interference, allocation of frequency to various services, registration of frequencies with the IFRB, and vesting of national rights to spectrum. They also address provision of special services such as staffing and operations, inspection of radio stations, operators' certificates, working conditions in mobile services, and procedures for working with other stations.

Final Acts of the Regional Administrative Radio Conference (Region 2) on Medium Frequency Broadcasting. Rio de Janeiro, Brazil, 1981. Entered into force for those countries ratifying it January 1, 1982. F.C.C. Doc. No. 79-166.

Includes provisions relating to classes of stations, protection criteria, skywave interference, synchronized networks, site tolerance, and inter-regional interference in the AM (Medium Frequency) bands.

According to the official report of the U.S. delegation, the Final Acts accomodated all major U.S. objectives, technical standards, and plans, and post-Conference procedures were in the interests of the United States. (Problems of interference remain to be resolved.)

RELEVANT ACTIVITIES OF KEY INTERNATIONAL ORGANIZATIONS

International Telecommunication Union (ITU)

ITU Plenipotentiary Conference. Has ultimate responsibility for the ITU. Is the only body that can amend the International Telecommunication Convention. Decisions of the plenipotentiary conference are not binding on individual countries until ratified by their governments.

The most recent Plenipotentiary Conference was held in Nairobi, Kenya, from September 28 to November 6, 1982. According to the Report of the United States Delegation to the Plenipotentiary Conference the significant issues and their status were:

1) Article 4 of the International Communication Convention was amended to add the phrase "to promote and offer technical assistance to developing countries in telecommunications." This was added to the Purposes of the Union.

2) The traditional system of financing the ITU, through voluntary contributions of member nations, was continued, thereby blunting pressure to adopt a U.N. scale for the ITU.

3) Future elections of Directors of the CCIR and CCIT are to take place in the Plenipotentiary rather than in plenary sessions of each of these bodies.

4) A Cuzech proposal to sanction jamming was withdrawn prior to plenary session debate.

5) Article 33 of the International Telecommunication Convention, governing use of the geostationary orbit, was modified to include language which suggests a preference for developing countries and taking into account the geographical situation of particular nations.

6) The rights of Recognized Private Operating Agents (RPOAs) to participate in CCIs was retained.

World Administrative Radio Conferences (WARCs). Convened by a WARC, by an ITU Plenipotentiary Conference, or by the Administrative Council. WARCs are not held at regular intervals.

General WARC. September 24 to December 6, 1979. Broad range of topics. Final Acts are not yet ratified by, or implemented in, the United States. U.S. objective, according to the delegation chairman, was to support the ITU as the international agency capable of providing a useful forum for discussing global telecommunications needs and problems and of carrying out the complex decisions of the Conference. According to the official U.S. delegation report (see bibliography below), the United States had minimal reservations to the Final Acts.

Mobile services. February 28 to March 18, 1983. Also, August 1987, Geneva, Switzerland. Revision of Radio Regulations to introduce modern techniques for communications for stress and safety for ships.

Planning the HF bands allocated to the broadcasting service. (Shortwave broadcasting.) First session, January 1984. Second Session, October 1986. Jamming; evolutionary vs. a priori approaches to spectrum assignments; and lessening constraints on multiple use.

Space WARC. First Session, June 1985. Second Session, June 1988. Use of geostationary satellite orbit and planning of the space services utilizing it; and determination of the nature of rights of developing countries and equatorial states in allocation of positions in geostationary satellite orbit.

Regional Administrative Radio Conferences (RARCs).

Convened by Plenipotentiary Conference on recommendation of a previous WARC or RARC, or by proposal of the ITU Administrative Council. A majority membership of the ITU from that region must ratify the RARC.

(There are three regions: Region 1 includes Europe, Africa, and North Asia; Region 2, the Americas; and Region 3, Asia and Oceania.)

Medium frequency broadcasting service. 1981. Second session, Summer 1988. Planned medium frequency broadcast (standard AM) bands of Region 2, frequency bands for Western Hemisphere.

Direct broadcast satellite (Domestic). June 13-July 15, 1983. Region 2. Planning of the Broadcasting-Satellite Service in Region 2. A key issue for the United States will be to maintain flexibility in the plan to enable introduction of new technology.

A.M. rebroadcast use. First Session, early 1986. Second Session, late 1988. Planning for new service in the band, 1605-1705 kHz.

World Administrative Telegraph and Telephone Conferences.

December 1988. To consider proposals for a regulatory framework for new telecommunications services which have resulted from technological advances in all telecommunications services except radio.

Regional Administrative Telegraph and Telephone Conferences.

None scheduled.

Consultative Committee on International Telegraph and Telephone (CCITT)

Plenary Assemblies. The most recent CCITT Plenary Assembly was held in Geneva, Switzerland, in 1980. The next one will be in 1984. Meets every four years; organizes the committee for each four-year period; creates study groups and working parties; selects chairmen and vice-chairmen; and allocates questions to appropriate study groups. Also approves work of study groups and recommendations, provided these have unanimous agreement of study groups concerned, and publishes "handbooks" on particular fields of telecommunications. The recommendations include technical and operational standards, tariffs, administrative directives, and terminology statements which, while not legally binding on the members, form a desirable basis for bilateral and multilateral agreements. Most countries are represented by the government telecommunications administration. The State Department represents the United States. The United States appoints carriers, designated as Recognized Private Operating Agencies (RPOAs), as non-voting participants. Worldwide, there are 48 RPOAs approved for participation in the CCITT. Certain Scientific and Industrial Organizations (SIOs) are selected to be non-voting participants also. (Current RPOAs and SIOs are listed in the ITU List of Addresses which is updated annually.)

CCITT Study Groups. There are 18 study groups, two joint working parties, five special autonomous groups, and four regional tariff groups attached to study group III (general tariff principles). The study group members are from national telecommunications administrations, the regulatory authorities, or

private firms. In the United States, manufacturers, carriers, users, and scientific organizations are delegates to various study groups and working parties. The groups and working parties recommend standards, tariffs, and rules for transmission.

I. Definition and operational aspects of telegraph and telematic services. (Currently developing U.S. position on international inter-active videotex services.)

II. Telephone operation and quality of service.

III. General tariff principles.

IV. Transmission maintenance of international lines, circuits, and chains of circuits; maintenance of automatic and semi-automatic networks.

V. Protection against dangers and disturbances of electromagnetic origin.

VI. Protection and specifications of cable sheaths and poles.

VII. Data communication networks.

VIII. Terminal equipment for telematic services. (Currently developing U.S. position relating to international inter-active videotex services.)

IX. Telegraph services and terminal equipment.

X. (Not in use 1981-1984.)

XI. Telephone switching and signaling.

XII. Telephone transmission performance and local telephone networks.

XIII. (Not in use 1981-1984.)

XIV. (Not in use 1981-1984.)

XV. Transmission systems.

XVI. Telephone circuits.

XVII. Data communications over the telephone network.

XVIII. Digital networks (ISDN).

Consultative Committee on International Radio Communication (CCIR)

Plenary Assemblies. Meets every four years. Decides on questions to be studied, forms working groups and gives them terms of reference, designates chairmen and vice-chairmen of study groups, establishes schedules for working groups, passes resolutions and makes recommendations. (Published recommendations on technical and operational standards, tariffs, administrative directives, and terminology statements, while not legally binding, are generally adopted by the member nations as the basis for a functioning, cooperative international telecommunication network.) Also provides a forum for establishing the technical data which serves as the basis for WARCs and the IFRB.

The most recent CCIR Plenary Assembly was held in 1982 in Geneva, Switzerland. The next one will be held in 1986.

CCIR Study Groups. There are 11 study groups and, at any time, over 20 working parties. The composition of these is similar to the CCITT. (See above.)

1. Spectrum utilization and monitoring.
2. Space research and radioastronomy.
3. Fixed service at frequencies below about 30 MHz.
4. Fixed service using communication satellites.
5. Propagation in non-ionized media.
6. Ionospheric propagation.
7. Standard frequencies and time signals.
8. Mobile services.
9. Fixed service using radio-relay systems.
10. Broadcasting service (sound).
11. Broadcasting service (television).

Joint Study Groups. CCIR administers two joint study groups:

Television and Sound Transmission (CMTT); and

Definitions and Symbols (CMV).

CCITT administers 1 joint study group:

Circuit Noise and Availability (CMBD).

International Frequency Registration Board (IFRB)

Functions. 1) To effect an orderly recording of frequency assignments made by the different countries and of the positions assigned by them to their geostationary satellites in accordance with the procedures prescribed in the Radio Regulations; and 2) to furnish advice to members of the ITU with a view to the operation of the maximum practical number of radio channels in those portions of the spectrum where harmful interference may occur and to the equitable, effective, and economical use of the geostationary satellite orbit.

Composition. (See Treaties and Agreements, above.)

Administrative Council

Functions. (See Treaties and Agreements, above.)

Composition. (See Treaties and Agreements, above.)

GOVERNMENT LIAISON FOR WARCs and RARCs

Space WARC
Anthony M. Rutkowski
Office of Science and Technology
FCC

High Frequency WARC
Neil McNaughten
Office of Science and Technology
FCC

Mobile Services WARC
Lawrence M. Palmer
Office of Science and Technology
FCC

Delegation to DBS RARC
Abbott L. Washburn, Chairman
Special Assistant Leslie A. Taylor
FCC
(This RARC adjourned July 1983.)

EXECUTIVE BRANCH INTERAGENCY COMMITTEES

Senior Interagency Group on International Communications and Information Policy

William J. Schneider, Undersecretary for Security Assistance Science and Technology, Chairman

Ambassador Diana Lady Dougan, Executive Secretary

Members: Commerce (NTIA), BIB, OMB, USIA, NSC, State, NASA, DOD, USTR, AID, OSTP, Central Intelligence Agency, and FCC as an observer.

Purpose. To oversee and review the development of international telecommunications and information policy.

Interdepartment Radio Advisory Committee (IRAC)

Leo Buss, Acting Director
Office of Spectrum
Plans and Policies, NTIA

Members: Agriculture, U.S. Air Force, U.S. Army, Commerce, U.S. Coast Guard, U.S. Marines, DCA, Energy, Federal Emergency Management Administration, Department of Transportation, FCC, General Services Administration, Public Health Service, Interior, USIA, Justice, Federal Bureau of Investigation, U.S. Navy, NASA, National Science Foundation, State, Treasury, U.S. Postal Service, Veterans Administration. (Users of spectrum allocated to the Federal Government.)

Purpose. International activities include technical preparation for WARCs and RARCs. Establishes ad hoc committees, e.g. to make recommendations to the Federal government concerning implementation of the Final Acts of WARCs; and to carry out preparations necessary for U.S. participation in WARCs; to review and recommend positions regarding U.S.- Canadian agreements on spectrum allocation.

IRAC Ad Hoc Committee No. 176, High Frequency Broadcasting WARC

Chairman, Lewis Bradley, NTIA

Purpose. To prepare the technical aspects of U.S. positions at the High Frequency WARC.

IRAC Ad Hoc Committee No. 178, Space WARC

Chairman, Thomas Walsh, NTIA

Purpose. To carry out preparations necessary for participation in the Space Services WARC, particularly developing the U.S. position on band/service selection, approaches to planning, and technical issues.

PUBLIC ADVISORY COMMITTEES TO THE U.S. GOVERNMENT

Space WARC. Advisory Committee for the 1985 ITU World Administrative Radio Conference on the Use of the Geostationary Satellite Orbit and the Planning of the Space Services Utilizing It.

Chairman, Stephen E. Doyle
Aerojet Liquid Rocket Company
Shingle Springs, California

Working Group A: Services, Facilities and U.S. Interests
Chairman, William R. Shnicke
Communications Satellite Corporation
Washington, D.C.

Working Group B: Political, Institutional, and International Considerations
Chairman, Ronald F. Stowe
Satellite Business Systems
McLean, Virginia
Task Group B-1: Legal Implications
Chairman, Martin A. Rothblatt, Esq.
Washington, D.C.

Working Group C: Available U.S. Options and Stategies
Chairman, P.G. Ackerman
Hughes Aircraft Company
Los Angeles, California

Working Group D: Economic Analysis
Chairman, Dr. Kirit Patel
Communications Studies and Planning International, Inc.
New York, New York

United States Organization for the CCITT

Earl S. Barbely, Chairman
Office of International Telecommunications
Department of State

Acting Chairman
United States CCITT Study Groups

Study Group A: Chairman, Earl S. Barbely, Department of State, U.S. Government Regulatory Policies. Operational, tariffing, and policy aspects of international telecommunications services, including telephone, telegraph, telex, videotex, teletex, data transmission services, public data networks, leased circuits, and other services.

Study Group B: Chairman, Roy Andres, MCI/Western Union International, Washington, D.C. Telegraph Operations. All aspects of telegraph operations and maintenance.

Study Group C: Chairman, Henry Marchese, AT&T, Basking Ridge, New Jersey. World Wide Telephone Network. All aspects of international telephone operations.

Study Group D: Chairman, Thijs de Haas, NTIA, Institute for Technical Standards, Boulder, Colorado. Data Transmission. Non-regulatory problems arising in telecommunications relating to international data transmission service. Members are from a wide variety of government agencies, corporations, scientific organizations, and industry associations.

Joint Study Group for ISDN: Chairman, Thjis de Haas. International Aspects of ISDN. Members of Study Groups A,B,C and D are members of the Joint Study Group.

United States Organization for CCIR

Richard E. Shrum
Office of International Communications Policy
Department of State
Chairman

Richard D. Parlow
Acting Associate Administrator,
Office of Federal Systems Management
NTIA
Vice Chairman

Robert S. Powers
Chief Scientist
PCU
Vice Chairman

Members:

Federal Government. Bureau of Industrial Economics, NTIA in Commerce; Air Force, Navy, Army in DOD; Energy; Coast Guard; Federal Aviation Administration; Research and Special Program Administration in Dept. of Transportation; FCC; NASA; and USIA.

Recognized Private Operating Agents (RPOAs). Aeronautical Radio, Inc.; AT&T; Communications Satellite Corp.; GTE; MCI; RCA Corp.; Satellite Television Corp.; WUI, Inc.; and WU Corp.

Scientific and Industrial Organizations (SIOs). American Broadcasting Companies, Inc.; American Radio Relay League; California Institute of Technology; CBS,Inc.; Computer Sciences Corp.; General Electric Co.; GTE; Harris Corp.; Hughes Aircraft Co.; ITT Corp.; Northrop Corp.; Public Broadcasting Service; Raytheon Co.; RCA Corp.; Rockwell International; Society of Motion Picture Engineers; and Systems General Corp.

National Associations. Electronic Industries Assn.; Institute of Electrical and Electronics Engineers, Inc.; National Association of Broadcasters; National Research Council; Radio Technical Commission for Maritime Services; U.S. CCITT National Committee; U.S. Committee for the International Electrotechnical Commission; and Public Member.

United States CCIR Study Groups

Chairmen,

1. Dr. William F. Utlaut, NTIA, Boulder, Colo.
2. Mr. Harold G. Kimball, NASA, Washington, D.C.
4. Mr. James B. Potts, Comsat World Systems, Washington, D.C.
5. Dr. Harold T. Dougherty, ITS, NTIA, Boulder, Colo.
6. Mr. Charles M. Rush, ITS, NTIA, Boulder, Colo.
7. Mr. Hugh S. Fosque, NASA, Washington, D.C.
8. Mr. Herbert T. Blaker, Rockwell Int'l, Arlington, VA.
9. Mr. Alex C. Latker, FCC, Washington, D.C.
10. Mr. Neal K. McNaughten, FCC, Washington, D.C.
11. Mr. Neal K. McNaughton, FCC, Washington, D.C.

DBS RARC 1983 Advisory Committee

Edward R. Jacobs, Chief
International Staff
Office of Sciences & Technology
FCC

BIBLIOGRAPHY

Books, Reports, and Articles

Cerni, D.M. The CCITT: Organization, U.S. Participation, and Studies Toward the ISDN. U.S. Dept. of Commerce, NTIA. April 1982. 129 pp. Report presents a survey of the CCITT and of its role in the study and evolution of the proposed, worldwide, telephone-based ISDN.

Codding, G.A. and A.M. Rutkowski. The International Telecommunication Union in a Changing World. Artech House, Inc. Dedham, Massachusetts. 1982. 414 pp. Study of the history and operations of the International Telecommunication Union.

Congress of the United States. Office of Technology Assessment. Radiofrequency Use and Management. Impacts of the World Administrative Radio Conference of 1979. Washington, D.C. 1982. An analysis of the 1979 WARC and recommendations for future action.

Crane, R.J. The Politics of International Standards. Ablex Publishing Corp. Norwood, New Jersey. 1979. 123 pp. Discusses the international debate over which of several national color television standards should be adopted.

International Telecommunication Union. CCITT. Yellow Book. VIIth Plenary Assembly. Geneva. November 10-21, 1980. 10 Vols. Includes minutes, opinions, and resolutions of the assembly; discussions of tariff principles; characteristics of telephone connections and circuits; maintenance of equipment; telephone transmission quality; and telephone and telegraph switching and signaling, data communications, and protection against interference.

Gardner, Ambassador Michael R. Report of the United States Delegation to the Plenipotentiary Conference of the International Telecommunication Union. Nairobi, Kenya, September 28-November 6, 1982. Submitted to the Secretary of State by the Chairman of the U.S. Delegation. The official report of the U.S. delegation on the Nairobi Conference included a statement of significant issues and reports of committees.

International Telecommunication Union. CCIR. Recommendations and Reports of the CCIR, 1982. XV Plenary Assembly. Geneva. 1982. (Green Book). 14 Vols. ITU: Geneva, 1982. Volumes include information on spectrum, space research, fixed broadcast and satellite services, propagation in non-ionized media, standard frequencies, mobile services, broadcasting services, and the XVth Plenary Assembly.

Queeney, K.M. Direct Broadcast Satellites and the United Nations. Sijthoff and Noordhoff. Netherlands. 1978. 327 pp. Recounts significant activities dealing with the development of a nontechnical regulatory regime in the UN, certain of its sub-organs and specialized agencies, and other organizations concerned with economic, legal, technical, and socio-cultural implications of DBS.

Report of the United States Delegation to the Regional Administrative MF Broadcasting Conference (Region 2). Second Session. Rio de Janeiro, Brazil. November 9 - December 19, 1981. Includes the background and agenda for the conference, list of the U.S. delegation, organization of the conference, work of the committees, observations and conclusions.

Robinson, Glen O. Report of the Chairman of the United States Delegation to the World Administrative Radio Conference. Geneva, Switzerland. 1979. TD Serial No. 116. Office of International Telecommunications Policy, Department of State.

Rothblatt, Martin A. "Satellite Communication and Spectrum Allocation," 76 The Journal of International Law 56. 1982. The article describes the basic legal principle that underlies international regulation of the orbit/ spectrum resource, and introduces a jurimetric means to address international concern about the precise nature of this principle's application.

Rothblatt, Martin A. "The Impact of International Satellite Communication Law Upon Access to the Geostationary Orbit and the Electromagnetic Spectrum," 16 Texas International Law Journal 207. Spring 1981. The geostationary orbit and the electromagnetic spectrum are two storehouses of value, or resources, subject to increasingly vigorous international control. This article first describes geostationary satellite communication as the dispersion of value concentrated in the geostationary orbit and the electromagnetic spectrum. It then addresses the objectives of international satellite communications policy and the relative effectiveness of relevant legal rules in implementing these objectives.

Smith, Delbert D. and Martin A. Rothblatt, "Geostationary Platforms: Legal Estates in Space," 10 Journal of Space Law 31, Spring 1982. The concept "via satellite" describes a system of interdependent parts. These parts are grouped into two fundamental categories--the earth segment and the space segment. The article focuses on the system components which comprise the space segment.

Periodicals

Telecommunication Journal. International Telecommunication Union. Geneva. Monthly. Contains articles on ITU activities, external conferences, and international issues.

CHAPTER III

REGULATORY ENVIRONMENT

CURRENT TRENDS IN REGULATION

Leslie A. Taylor

Background

During the past 15 years, dramatic changes have occurred in the provision and regulation of domestic telecommunications services within the United States. Beginning in 1979, there have been major efforts to extend the domestic policies of deregulation and competition to the international arena as well. These include policy initiatives of the Federal Communications Commission (FCC), legislation, and U.S. positions taken within various international fora such as the International Telecommunication Union (ITU) and the Organization for Economic Cooperation and Development (OECD). 1/ This section summarizes the major actions taken to harmonize U.S. international and domestic telecommunications policy. A brief review of the highlights of domestic policy changes is necessary for an understanding of developments in international deregulation and competition.

Deregulation and Competition in U.S. Telecommunications

In the late 1960's, the FCC questioned whether it was in the public interest for the American Telephone and Telegraph Company (AT&T) to continue to be the dominant provider of U.S. telecommunications equipment and service. While domestic telephone service was of high quality, reasonably priced, and universally available, there was concern about its future capacity to innovate and integrate with rapidly growing data processing and information service industries. Telecommunications service was unfavorably compared to the innovative computer industry. 2/ Moreover, pressure from entrepreneurs in the equipment field and potential service providers necessitated FCC action.

First, the FCC addressed the issue of competition in the provision of terminal equipment. 3/ Then, it adopted policies permitting multiple and open entry in the provision of domestic telecommunications service, 4/ allowed resale and shared use of facilities and services, 5/ and sought to encourage cost-based pricing. 6/ An earlier separate proceeding, the 890 MHz Decision, 7/ permitted large users of telecommunications service to establish their own private microwave systems. This policy acquainted users with the fact that telecommunications service could be provided by someone other than the phone company.

In other pro-competition actions, the FCC created an open entry policy for domestic satellites. 8/ It also sought to eliminate most regulation for non-dominant domestic carriers, 9/ and endeavored to find a rationale for permitting AT&T to provide data processing and other enhanced service. 10/

During this pro-competition era, the Justice Department settled its antitrust case against AT&T. On August 11, 1982, U.S. District Court Judge Harold Green issued an order accepting the January settlement conditioned upon the parties' agreement to certain modifications. The impending separation of AT&T Long Lines 11/ from the operating companies created additional pressure on the FCC to resolve its access proceeding and provide a mechanism to replace the traditional separations and settlements procedures whereby interstate users compensate local phone companies for use of their facilities. 12/ The FCC was concerned that the subsidy flowing from interstate to local service, inherent in separation and settlements, would give customers an incentive to use services that bypass local networks. Further, without a shift to charging for access to interstate networks, there would be discrimination against competitive suppliers of long distance service. 13/

Consequences of Deregulation

Competition in domestic telecommunications has increased options for users of terminal equipment, services, carriers, and transmission facilities. There is also increased flexibility in the design of telecommunications systems and services. This is particularly apparent in the wide range of services available and planned for U.S. domestic satellites, such as television program transmission, customer-premises earth stations, new data retrieval and electronic mail offerings of companies like Tymnet and Telenet, and other new transmission and data services offered by Satellite Business Systems.

Based upon experience with domestic regulations, the FCC, other agencies, and industry perceive that U.S. customers with operations abroad could become increasingly dissatisfied with the cost and limited availability of choices internationally. In addition, there is concern that continued regulation will affect the ability of U.S. firms to remain preeminent in information services. That industry depends upon efficient and cost effective information transfer across national boundaries. Pro-competition policies would be expected to keep data transfer costs low and improve their efficiency and range of services.

Thus, since 1979, 14/ the FCC has initiated several rulemakings in order to implement its pro-competitive policies with regard to international telecommunications. In 1977, Congress also began to consider the need for new policies and legislation. A brief review of the U.S. international communications industry aids in the understanding of such initiatives.

The International Telecommunications Industry 15/

The International Record Carriers. Telecommunications services between the United States and other countries are provided by a number of private U.S. companies in cooperation with foreign entities. 16/ AT&T provides international message telephone service,

DATAPHONE, and some private line services through its Long Lines Department. The Hawaiian Telephone Company, a subsidiary of General Telephone and Electronics (GTE), provides domestic voice services within, and international services to and from, Hawaii. RCA Global Communications, Inc. (RCA Globcom), ITT World Communications, Inc. (ITT Worldcom), Western Union International (WUI), TRT Telecommunications, Inc. (TRT), FTC Communications, Inc. (FTCC), 17/ and U.S.-Liberia Radio Corporation (U.S.-LRC) are called international record carriers, or IRCs, because they traditionally have provided primarily record or data communications services. In recent years, these carriers have expanded their service offerings beyond the telex, message telegraph, and private line services to high speed and interactive data services.

Since World War II, the IRCs have not had significant operations within the continental United States, except in a limited number of "gateway" cities. Rather, domestic record services and the extension of overseas services beyond the gateways have been provided by the Western Union Telegraph Company (WUT). 18/ At one time, WUT also provided overseas service. However, in 1943, Congress amended the Communications Act of 1934 to allow WUT to merge with its major competitor. When WUT became a virtual monopoly carrier, able to favor its own international operations, Congress mandated the divestiture of its overseas operations and barred the firm from providing overseas record services. 19/

Comsat/INTELSAT. In 1962, Congress passed the Communications Satellite Act in order to establish a global communications satellite system. The Act also created the Communications Satellite Corporation (Comsat). Under State Department auspices, negotiations were held with other countries, and the International Telecommunications Satellite Consortium, an interim organization, was formed. It later evolved into the permanent structure of the International Telecommunications Satellite Organization (INTELSAT), whose membership has grown to 108. Its prime objective is to provide to all areas of the world the space segment required for international public telecommunications, on a commercial, non-discriminatory basis. Pursuant to the Interim Agreement, Comsat served as both the U.S. representative to, and manager of, the space system.

Under the permanent arrangements, 20/ Comsat is a technical adviser to the elected manager of the system and performs functions incidental to U.S. membership in INTELSAT. In this latter role, it is primarily a carrier's carrier that provides space segment capacity to the international record carriers and AT&T, who, in turn, provide service directly to the public. In the continental United States, 50 percent of the INTELSAT earth stations are owned by Comsat and the service carriers, respectively.

In addition to its INTELSAT obligations, Comsat was designated by the International Maritime Satellite Act of 1978 21/ to be the U.S. representative to the International Maritime Satellite Organization (INMARSAT). INMARSAT, modeled after INTELSAT, was created to

provide maritime communications via satellite. In this respect, Comsat does not operate as a carrier's carrier, but as a participating carrier, providing service directly to the public over the link from ship to U.S. earth stations. Other carriers, or the users themselves, provide service from the earth stations to customer premises.

A number of other companies have also recently applied to provide international services. In some cases, these carriers are providing variations on traditional services, such as store-and-forward telex. In others, they may be interconnecting with existing international common carriers to provide overseas access to a domestic service like data base.

Users. Approximately half of the international message telephone service is characterized by non-business usage, since most of its customers are U.S. residents with relatives and friends overseas. The remainder is attributed to businesses and government. International telegraph service is predominantly used by the general public, and international telex, by business customers. The international private lease services are used by a wide range of governmental and commercial customers, especially manufacturers, computer service providers, banking, foreign exchange, and brokerage customers. Government utilization of international private lease services has steadily declined, although it still constitutes approximately one-third of the total lease revenues of the U.S. international carriers.

Several new service offerings provide a means for overseas customers to connect to U.S. data bases that perform specialized engineering evaluations, medical diagnostics, and a variety of other functions. Customers who need such services include business, government, and the academic community. DATEL and DATAPHONE services enable the small international service user to accomplish both voice and data communications, such as facsimile, by accessing the public telephone network. International wideband private line 22/ services have been used mostly by the U.S. government, although a range of commercial services can be expected to become more widespread.

Facilities and the Development of Technology

The INTELSAT global satellite system and underseas cable are the primary types of facilities used for the international transmission of communications services. Their technology has developed rapidly over the last twenty years.

The first transoceanic submarine cable capable of providing voice service, TAT-1, was placed in operation across the North Atlantic in 1956. It was capable of providing only about thirty-six, two-way voice circuits. The latest North Atlantic submarine cable authorized for construction is TAT-7, with a capacity of 4,000 voice circuits. It is expected that the next generation of submarine cables, using fiber optic technology, will be available for transoceanic use in the late 1980's. This first digital cable will be capable of providing, in a basic

configuration, 12,000 voice grade circuits, as well as television transmission.

The technology of international satellites has also developed dramatically. The first international communications satellite, known as Early Bird, was launched in 1965 and had a total capacity of 240 voice grade circuits, or one TV circuit. The fifth generation of INTELSAT satellites, the first of which now operates over the Atlantic Ocean, is capable of providing more than 12,000 voice grade circuits plus two television channels in a base line configuration, with more complex configurations available. Further, their capacity and flexibility will be greatly enhanced by the use of circuit multiplier techniques, such as time division multiple access (TDMA) and speech interpolation devices.

There are major differences in the way the two kinds of facilities are owned and managed, in their operations and capabilities, in their economic characteristics, and in the way they are planned. Generally, submarine cables are owned and operated equally by the U.S. service carriers and their foreign correspondents. They provide point-to-point communications between two countries or continents and are traditionally planned for and operated by these two nations in conjunction with any other administration that may desire to purchase circuits for extension to their domestic communications networks. The total cost of a submarine cable system, with a typical design life of about twenty-four years, includes manufacturing and laying costs, operating and management costs, research and development, repairs, and other directly associated expenses, and is thus relatively simple to determine.

By contrast, international communications satellites are planned for, owned, and operated by the international organization INTELSAT. Ownership of INTELSAT is vested, according to use, in the various signatories to the INTELSAT Operating Agreement. Comsat, the U.S. signatory, owns the largest share of the Organization, or approximately twenty-two percent. Satellites are multi-point to multi-point communications facilities providing great operational flexibility. Earth stations accessing the INTELSAT system are owned by the individual administrations. Consequently, a great deal of international technical cooperation is necessary and has become routine. Finally, costs of a satellite circuit are not as simply determined, since the objective of satellite system planning is the establishment of a global communications network. Thus, INTELSAT charges to Comsat reflect a certain amount of averaging, so that high volume routes provide some subsidy to low volume routes. Economic and operational comparisons between satellites and cables have been, and are likely to remain, complex and controversial.

While there are significant economic and practical differences between the two types of facilities, they have both witnessed an explosion in the development of telecommunications and information technology in the last decade. Rapid increases in technology are perhaps most apparent in the gross capacities and lowered unit costs of the transmission media. However, other technological developments are equally important. Satellite design has become increasingly

sophisticated, allowing for frequency re-use and configurations, using narrow or spot beams. Earth station design has also improved exponentially so as to enable, for example, a single antenna to access a number of different satellites. Both the size and cost of earth stations has dramatically decreased in the last few years.

In the submarine cable field, the development of fiber optic, digital technology will not only greatly increase the capacity of cables and reduce per circuit costs, but will also expand the variety of services available. Multiple landing points will be feasible, allowing more sophisticated network configurations. In this new environment, capacity will no longer be defined in terms of available voice-grade circuits, but in terms of available spectrum bandwidth.

Technology has also advanced development in areas other than transmission facilities. The merger of computer and communications technology has affected the international as well as the domestic environment. Further, in both the United States and abroad there has been considerable progress in the development of digital communications paths. This will lead inevitably to a blurring of traditional service distinctions in the area of the Integrated Services Digital Network (ISDN).

U.S. Regulation

Regulation of international communications is required by the Communications Act of 1934, as amended, 23/ and the Communications Satellite Act of 1962, 24/ and governed by the FCC. The regulatory scheme imposed by the 1934 Act generally does not distinguish between domestic and international common carrier services. Hence, the same broad public interest standard contained in the 1934 Act applies to international facilities and services, and there is no legislative recognition of unique international considerations, such as foreign correspondent requirements. The Satellite Act also does not address the legal obligations imposed by the later created INTELSAT & INMARSAT Agreements. Moreover, while the Satellite Act contemplates a role for the Executive Branch, the 1934 Act does not provide for the consideration of Presidential views on matters relating to foreign policy or national security.

Under the current regulatory scheme, a communications common carrier is authorized by the FCC to provide service and to construct, acquire, or use facilities. Each international common carrier is further required to file tariffs, with accompanying justification, in the same manner as a domestic common carrier. Additional regulatory burdens are placed upon international carriers, and they are required to report on the status of foreign negotiations and file with the FCC copies of operating agreements with foreign entities. These are mostly pro forma requirements, however, that have not been subject to a great deal of regulatory attention.

Authorization and Utilization of Facilities. One area of significant regulatory involvement is the authorization and utilization of facilities.

Since Comsat is primarily a carrier's carrier with no direct access to the public, it is dependent upon the decisions of service carriers to use the global satellite system. For a number of reasons, including ownership, control, and rate base regulation, the service carriers have preferred the use of submarine cables. Consequently, the FCC has ordered carriers to use both types of facilities in order to assure use of the satellite system. Both the U.S. service carriers and their foreign correspondents severely criticize this approach and object to its inflexibility and the delays caused by the need to seek FCC approval for cable circuit activations.

In 1974, the regulation of international common carriage began to receive increased attention from the FCC. A preliminary examination elicited substantial concerns that existing industry practices, agency policies, and statutory provisions were proving to be impediments to assuring public availability of needed services at reasonable rates. There were two critical turning points. First, the Commission determined that authorization and utilization of facilities should, where possible, be the result of a mutual planning process between the U.S. service carriers, Comsat, and foreign administrations. While international planning had occurred in both the cable and satellite arenas, the two types of facilities had never been programmed together. A process for consulting on facilities planning and utilization for the North Atlantic area was developed under the auspices of the FCC and the European correspondents and continues today. 25/

Second, two domestic carriers, Graphnet, Inc. and Telenet, now a subsidiary of GTE, sought FCC authority to provide facsimile and packet-switched data services offered domestically to international points. Shortly after the filing of these applications, the existing IRCs filed similar proposals. The FCC determined that such services were not being offered, that there was an unmet need, and that the applications should therefore be granted. 26/ The FCC believed that the entry of the two new carriers would spur on competition in the international marketplace and hasten the delivery of needed services at reasonable rates.

The data-based service offerings proposed by Graphnet are now being provided through interconnection with the existing IRCs because it has been unable to directly secure the necessary operating agreements from foreign correspondents. While this is clearly preferable to no service at all, it is far from an optimal technical and economic arrangement.

The Commission recognized that its experiences in both the facilities planning and authorization of new service carriers arenas necessitated a more expansive reexamination of its regulatory philosophy in international communications. It began this process in 1979 when it instituted a series of rulemakings designed to reorient the U.S. approach to the international market.

Major FCC International Policy Initiatives

Some of the fundamental differences between international and domestic telecommunications are: the necessity for cooperation with foreign correspondents, usually government monopolies; market division between voice and record carriers, domestic and international carriers, and cable and satellite facilities; and the existence of Comsat as a monopoly supplier of satellite facilities.

In 1979 and 1980, the FCC broke down the market divisions and allowed additional entry by new carriers, translating several domestic policies into the international arena. An audit of the rates of return for the international record carriers served as a point of departure from these initiatives. The audit concluded that although the IRCs could not be audited because they did not adhere to FCC recordkeeping requirements, it appeared that their rates of return were well in excess of authorized amounts. 27/ The FCC concluded that the public would be better served by introducing additional competition into the industry, rather than by conducting a lengthy and costly rate of return proceeding. 28/ Thus, it authorized the IRCs to operate from numerous domestic points, rather than from previously limited gateways; 29/ authorized Western Union to provide international service 30/ and eliminated its domestic telegraph monopoly; 31/ and permitted AT&T to offer DATAPHONE service and the IRCs, DATEL service. 32/

In addition, the FCC also authorized new carriers to provide international telecommunications service, 33/ although they lacked operating agreements previously thought to be a prerequisite to obtaining a Section 214 authorization. The foreign correspondents' lack of desire to operate with additional carriers made the quest to introduce them difficult.

A major policy change was addressed in the FCC proposal to reconsider its separation of the international voice and record market. 34/ The market division, known as the TAT-4 Policy, originated in 1964 and limited AT&T to voice-only service internationally. 35/ Its rationale was based upon the supposition that the IRC industry would be destroyed if AT&T provided competitive non-voice services. Some interpreted the policy as restricting the IRCs to non-voice service. In August, 1982, the FCC considered adopting an order that would have clarified that the IRCs were not so limited. However, it delayed action until December, 1982, when it eliminated the policy in its entirety and permitted all services by all carriers subject to obtaining Section 214 authorization. 36/

Entry into these new markets, then, will require appropriate operating agreements. In addition to the above-cited proceedings, the Commission has implemented the Record Carrier Competition Act which eliminates the dichotomy between international and domestic record service. 37/ These actions, too numerous to discuss here, concern the entry of Western Union into the international market, the expansion of IRC operations in the United States, 38/ monetary settlements between the IRCs and Western Union, and the allocation of traffic to uncertified U.S. carriers.

Comsat Structure and Role

In extending its pro-competitive initiatives to the international telecommunications area, the FCC was challenged by the issue of Comsat's role as a monopoly supplier of international satellite transmission facilities and services. Comsat, created by the Communications Satellite Act of 1962, 39/ is the U.S. signatory to INTELSAT and has generally functioned as a carrier's carrier. It originally did not serve end users directly, but leased capacity on international satellite facilities to other U.S. carriers, such as AT&T and the IRCs. As a rate base regulated carrier, Comsat is permitted to earn a specified rate of return on capital investment. 40/ This capital investment includes Comsat's own facilities, as well as facilities in INTELSAT, of which it owns a 24 percent share.

While Comsat's role within INTELSAT furthered the growth of the international satellite system and stimulated development in satellite technology in the United States, various competitors raised questions about the continuance of its monopoly. 41/ When Comsat was designated the U.S. signatory to INMARSAT, the international maritime satellite consortium, Congress required the FCC to analyze its structure and involvement in non-INTELSAT and non-INMARSAT activities. 42/ This resulted in the comprehensive Comsat Study 43/ which examines its role under the Comsat and INMARSAT Acts and its business activities. The study further recommends actions that would allow additional competition in international telecommunications and minimize possible conflicts of interest for Comsat. Some of the corporate restructuring it proposed was implemented by the Corporation and later approved by the FCC. 44/ The Study also recommended that the FCC implement a number of proceedings to increase competition in the provision of international service.

One such recommendation was to permit Comsat to serve customers directly in order to introduce into the international telecommunications market a substantial new competitor in end user services. 45/ Although the Communications Satellite Act does not explicitly prohibit direct service, neither does it explicitly authorize it.46/ Thus, revision of its authorized user policy was a major policy shift for the FCC. With the exception of leased channel service to large customers such as the U.S. government, Comsat claimed to have no particular interest in pursuing business as an end service carrier. It has since been granted permanent authority to do so at all U.S. international earth stations. 47/

In addition, the FCC initiated those proceedings recommended in the Comsat Study that explore the possibility of altering existing arrangements for ownership and access to U.S. international earth stations. 48/ This has considerable implications for carriers and users of international satellite service since a liberal policy would enable them to custom-design and locate such earth stations. Conceivably, such competition could also result in lower costs.

A third proceeding that was initiated at the conclusion of the Comsat Study concerns access to the INTELSAT space segment. 49/ This also raises difficult policy questions inasmuch as it requires examination of the extent of Comsat's role as U.S. signatory to INTELSAT. The FCC, as of April 1983, had not made a final determination on the latter two proceedings. 50/

Application of Computer II to International Telecommunciations

When the FCC adopted rules defining basic and enhanced telecommunications (Computer Inquiry II), 51/ it did not fully discuss their applicability to international telecommunications. 52/ This issue has come to the forefront as new carriers seek to provide international telecommunications service.

The FCC decision that Computer II applies internationally 53/ has been challenged on the basis of an inadequate record. Existing carriers express concern that if Computer II is applied, uncertified service providers will enter the market and circumvent FCC accounting and settlements policies designed to preserve competition. 54/ They also argue that enhanced service providers will anger overseas Post Telegraph, & Telephone Authorities (PTTs) and thereby disserve all U.S. carriers and the public at large. Another concern is that uncontrolled entry by enhanced providers will introduce alien-owned telecommunications operations into the United States, as has occurred in the domestic market. While the FCC maintains that the Computer II distinction applies to international service, it is exploring the timetable and methodology for implementing the policy internationally.

Resale and Shared Use of International Telecommunications Facilities

As part of its program to implement pro-competitive domestic policies in the international sphere, the FCC, in 1980, proposed elimination of the resale prohibition in the tariffs of international carriers. 55/ Judging from the benefits flowing from domestic resale and shared use, the FCC concluded that elimination of the restriction would enhance competition and provide an incentive for rate reductions. Carriers, overseas correspondents, the CCITT 56/ and users of leased channel service immediately attacked the proposal.

Critics challenged this as a backdoor attempt to introduce additional U.S. carriers and reduce the availability of less costly leased channel services internationally. Heavy users of these services, such as the U.S. Department of Defense, Control Data Corp., and the General Electric Co. were concerned that overseas PTTs would justify the total elimination of leased and channel service and the extension of usage-sensitive pricing on the implementation of resale and shared use. This was the subject of an unprecedented letter by the Chairman of the CCITT to the Department of State and FCC. 57/

The FCC's position on extending Computer II to international services had been the target of similar accusations. Currently, the FCC has no plans to conclude this proceeding, and U.S. efforts within the CCITT Study Group III continue to fight for preservation of leased channels. 58/

Relationship with PTTs: Accounting and Settlement

Policymaking in international telecommunications must necessarily take into consideration the cooperative nature of the venture. Thus, there may be limits to the extent domestic deregulatory and pro-competitive policies can be implemented internationally.

This recognition is particularly acute in the accounting and settlement area. 59/ Accounting and settlement, too complicated to describe herein, concerns the manner in which U.S. carriers and overseas PTTs divide revenues for cooperatively provided service.

For many years the FCC has required U.S. carriers serving the same routes to have "parallel" settlement rates with the overseas PTTs, for fear that varying rates would lead PTTs to force carriers into a price war and eventually terminate or reduce operations with all but one. This would drastically reduce or eliminate competition for the United States. The existing policy poses a dilemma in a competitive environment since one means of competitive entry for service carriers is to bargain with PTTs and thereby create the opportunity for whipsawing.

Ironically, several European administrations sought to initiate such a competitive approach in 1982. 60/ They requested U.S. carriers to submit new proposals and settlement terms for interconnection. After the FCC and U.S. Department of State intervened, these countries retreated. It appears this approach contemplates skipping the interim stage of increased competition in order to arrive at interconnection with only one U.S. carrier. It is also noteworthy that the administrations backed off when the U.S. government intervened. This points out the importance of continued U.S. government oversight of international telecommunications, in contrast to its lessened role domestically.

Future Scenario: New Frontiers

Judging from the trends of the last decade, government policy initiatives will likely continue to abrogate the traditional dichotomies in international telecommunciations. In particular, there will be considerable pressure to allow competitive entry in the provision of international satellite service. 61/ Thus, the results of proceedings regarding earth station ownership and direct access to INTELSAT are of critical significance because they could enhance the extent of participation in the provision of international satellite service. 62/

This latter area raises difficult questions with respect to U.S. policy on INTELSAT. Thus, it may be several years before satisfactory new arrangements could be designed, even if approved by the FCC.

Interestingly, domestic history may be repeating itself in international telecommunications. The concept of monopolizing the rendering of transmission facilities or services is not likely to withstand pressures from competitors. Notwithstanding U.S. commitment to INTELSAT, Comsat will have increasing difficulty arguing economies of scale and the need for subsidized communications on thin routes. The situation is not dissimilar to the era of Bell System claims that the system was the solution. The U.S. interest in maintaining a vigorous global satellite may not be mutually exclusive with regional systems and other competitive arrangements.

Comsat will face other challenges as the FCC retreats from stringent cable satellite use requirements. In its Authorized User decision, the FCC stated its plan to phase out such requirements as Comsat provides service to end users. AT&T Long Lines' choice of facility or eventual shift of traffic to high-capacity, fiber optic cables could have a dramatic impact on Comsat and INTELSAT, depending on the extent of deregulation.

In addition, the Government's role in facility planning may warrant reconsideration in light of the recent ITT case cited herein. Other interesting developments in international telecommunications are also likely as AT&T exercises its new authority to offer all types of services. Implementation of ISDN internationally will enhance AT&T's opportunity to expand its market. In light of most overseas administrative pre-disposition to deal with as few carriers as possible, AT&T may be in a prime position to capture a larger market share.

On the other hand, some PTTs are taking a more favorable view of competition, and new U.S. entrants, such as SBS and Telenet, are finally obtaining operating agreements. Comsat will likely obtain such agreements it requires as it enters the end service market. Unquestionably, the increased use of international telecommunications and the shift of developed nations' economies to information related activities will require a continued regulatory response in the years ahead.

FOOTNOTES

1. The U.S. Congress has addressed these issues as well in bills such as S. 2469, 97th Congress. Congressional action may come within the next few years, along with or possibly separate from legislation on domestic telecommunications. For brevity's sake, this paper focuses primarily upon regulatory initiatives.

2. Of course, the 1956 Consent Decree prohibited AT&T's direct entry into the data processing industry. U.S. v. Western Electric Co., Inc. et al, U.S. D.C. N.J. C.A. No. 17-49, Jan. 24, 1956.

3. Hush-a-Phone v. U.S., 238 F.2d 266 (D.C. Cir. 1956); Carterfone, 13 F.C.C.2d 420 (1968), recon. denied, 14 F.C.C.2d 571 (1968); Customer Interconnection, 61 F.C.C.2d 766 (1976). See also North Carolina Utilities Commission v. FCC, 537 F.2d 787 (4th Cir. 1976), cert. denied, 429 U.S. 1027 (1976).

4. Specialized Common Carrier, 29 F.C.C. 2d 870 (1971), aff'd sub nom., Washington Utilities and Transportation Commission v. FCC, 513 F.2d 1142 (9th Cir. 1975); Domestic Satellites, 35 F.C.C.2d 844 (1972), aff'd sub nom., Network Project v. FCC, 511 F.2d 786 (D.C. Cir. 1975).

5. Resale and Shared Use of Common Carrier Services, 60 F.C.C.2d 261 (1976), recon. denied, 62 F.C.C.2d 588 (1977), aff'd sub nom., AT&T v. FCC, 572 F.2d 17 (2d Cir. 1978), cert. denied, 439 U.S. 875 (1978).

6. AT&T, 64 F.C.C.2d 1 (1977) (Phase II); AT&T, 84 F.C.C.2d 384 (1980, 1981).

7. Above 890 MHz Report and Order, 27 F.C.C. 359 (1959).

8. 35 F.C.C.2d 844 (1972), recon., 38 F.C.C.2d 665 (1972).

9. First R. and O., CC Doc. No. 79-252, 85 F.C.C.2d 1 (1980); Further Notice, 84 F.C.C.2d 445 (1980, 1981); Second R. and O., (deregulation of resellers), 91 F.C.C.2d 59 (1982). The proceeding was expanded to consider deregulation of international record carriers. On April 25, 1983, the FCC issed a NOI in this matter.

10. Amendment of §64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), Doc. No. 20828, 77 F.C.C. 2d 384 (1980) (Final Decision); 46 Fed. Reg. 5984 (1981) (Reconsideration Order).

11. The parties agreed on August 24, 1982, and the decree was modified.

12. On December 22, 1982, the F.C.C. voted to adopt an access charge plan to become effective January 1, 1984. Access Charge Proceeding, 3rd R. and O. F.C.C. Doc. No. 82-579, (released February 28, 1983). See also, Fourth Supplemental Notice, 90 F.C.C.2d 135 (1982).

13. See note 12, supra.

14. Increasing recognition of the importance of international telecommunications was made in 1974 when the Commission initiated a comprehensive approach to international facilities planning.

15. This historical section is largely extracted from materials written by Vernonica M. Ahern, Esq., Chadbourne, Park, Whiteside & Wolff. See Report of the Federal Communications Commission on International Telecommunications Policy, July 13, 1977.

16. These entities are often governmental agencies (PTTs) or government appointed monopolists. Both are generally termed "foreign correspondents."

17. FTC Communications, previously known as the French Telegraph Cable Company, has recently been reorganized so that ownership of the company, held by the Government of France, can be transferred readily to U.S. interests. See 71 F.C.C.2d 393 (1979), vacated, 77 F.C.C.2d 73 (1979).

18. But see ITT World Communications Inc., 76 F.C.C.2d 115 (1979), appeal docketed sub nom., Western Union Telegraph Co. v. FCC, No. 79-1352 (D.C. Cir. Apr. 2, 1979).

19. Section 222 of the Communications Act of 1934 was repealed by the Record Carrier Competition Act of 1981, Pub. L. No. 97-130, 95 Stat. 1687 (1981). Section 222 was long viewed as creating a dichotomy between domestic and international record service.

20. INTELSAT Agreement, TIAS No. 7532, Washington, D.C. 1971.

21. Pub. L. No. 95-564, 92 Stat. 2392 (1978).

22. Wideband channels have a greater bandwidth than single voice grade channels, thereby permitting the multiplexing (i.e., combination) of several channels and their transmission at high speeds or in "packages" or groups which permit the capacity of the channel to be utilized in a more efficient and economic manner.

23. 47 U.S.C. §151, et seq. (1976).

24. 47 U.S.C. §701, et seq. (1976).

25. Certain aspects of this process were challenged successfully in ITT World Communications Inc. v. FCC, D.C. Civil Action No. 80-0428 (D.C.D.C. Oct, 17, 1980), D.C. Cir. Nos. 80-1721, 2324, 2401 (1983).

26. Graphnet Systems, Inc., 63 F.C.C.2d 402 (1977), recon. denied, 67 F.C.C.2d 1020 (1978), remanded for imposition of time limit on authorization, 595 F.2d 897 (2d Cir. 1979).

27. Preliminary Audit and Study, 75 F.C.C.2d 726 (1979, 1980), appeal docketed sub nom., Western Union Telegraph Co. v. FCC, No. 79-2497 (D.C. Cir. Dec. 14, 1979).

28. However, subsequently, a rate of return proceeding of limited scope was initiated in ITT World Communications, Inc. Required Rate of Return, 85 F.C.C.2d 561 (1981).

29. International Record Carriers' Scope, 76 F.C.C.2d 115 (1979, 1980), appeal docketed sub nom., Western Union Telegraph Co. v. FCC, No. 79-1352 (D.C. Cir. Apr. 2, 1979), consolidated with, Western Union Telegraph Co. v. FCC, No. 79-2494 (D.C. Cir. Dec. 14, 1979).

30. Western Union Telegraph Co., 75 F.C.C.2d 461 (1979), vacated sub nom., ITT World Communications, Inc. v. FCC, No. 79-4220 (2d Cir. Aug. 25, 1980).

31. Domestic PMS by Entities Other Than Western Union Telegraph Company, 84 F.C.C. 2d 930 (1981), appeal docketed sub nom., Western Union International, Inc. v. FCC, No. 80-1937 (D.C. Cir. Aug. 11, 1980), consolidated with, ITT World Communications, Inc. v. FCC, No. 79-1046 (D.C. Cir. Jan. 19, 1979),

32. AT&T DATAPHONE, 75 F.C.C.2d 682 (1979, 1980), appeal docketed sub nom., Western Union International, Inc. v. FCC, No. 80-1286 (D.C. Cir. Mar. 11, 1980).

    Western Union International, Inc., 76 F.C.C.2d 166 (1979), appeal docketed sub nom., RCA Global Communication, Inc. v. FCC, No. 80-1310 (D.C. Cir. June 13, 1980), consolidated with, Western Union International, Inc. v. FCC, No. 80-1286 (D.C. Cir. Mar. 11, 1980).

33. ITT World Communications, Inc., 76 F.C.C.2d 15 (1979, 1980) and International Relay, Inc. (IRI), 77 F.C.C.2d 819 (1980). Graphnet and Telenet had previously been authorized as well, although they lacked operating agreements. See note 26, supra.

34. Overseas Communications Services (TAT-4), 84 F.C.C.2d 622 (1980).

35. AT&T Transatlantic Submarine, TAT-4, 37 F.C.C. 1151 (1964).

36. TAT-4, CC Doc. No. 80-632, F.C.C. Doc. No. 82-547, adopted December 8, 1982, released December 22, 1982, stayed March 1983 pending appeal. (TRT v. FCC, Case No. 83-1193.)

37. The RCCA also rendered a dead letter the troublesome precedent of FCC v. RCA, 346 U.S. 86 (1953), which had served to thwart competition for years.

38. See also Deregulation of International Telex Equipment, Doc. No. 21005, 86 F.C.C.2d 411 (1981). For students of regulation, the history of Doc. 21005 provides insight into the desire of the regulatee to continue to be regulated.

39. Communications Satellite Act of 1962, 47 U.S.C. §701, et. seq., 76 Stat. 419, as amended.

40. In addition, the Commission began to consider competition as an alternative to the costly, difficult rate of return style of regulation. See Comsat Rate Case, 68 F.C.C. 2d 941 (1978).

41. See 47 U.S.C. §735(b)(4) and the Authorized Users decision, 4 F.C.C.2d 421 (1966), recon., 6 F.C.C.2d 593 (1967).

42. International Maritime Satellite Act, 47 U.S.C. §751, et. seq.

43. Comsat Study, 77 F.C.C.2d 564 (1980), and Notice of Inquiry implementing the study, 74 F.C.C.2d 59 (1979).

44. 90 F.C.C.2d 1394 (1982), recon. denied, F.C.C. Doc. No. 83-121 (1983). See also 81 F.C.C.2d 287 (1980) and Shipboard Terminals, 90 F.C.C.2d 488 (1982).

45. Proposed Modification of Authorized User Policy, 90 F.C.C.2d 1394 (1982). See also Spanish International Network, 70 F.C.C.2d 2127 (1978), appeal sub nom., ITT World Communications, Inc. v. FCC, No. 79-1046 (D.C. Cir. May 11, 1979), where Comsat was permitted to provide television program transmission service directly to customers.

46. See §305(2)(2) of the Comsat Act. 47 U.S.C. §735(b)(4).

47. Mem. Op. and O., F.C.C. Doc. No. 83-41 (action January 27, 1983), stay granted, U.S. Ct. of Appeals, D.C. Cir. March 1983.

48. Intelsat Earth Station Ownership Inquiry, 90 F.C.C.2d 1458 (1982). See also Interim Policy, 5 F.C.C.2d 812 (1966).

49. Regulatory Policies Concerning Direct Access to INTELSAT Space Segment for the U.S. International Service Carriers, CC Doc. No. 82-548, 90 F.C.C. 2d 1446 (1982).

50. Id.

51. Computer Inquiry II, cited supra.

52. See note 4,84 F.C.C.2d 50 (1980). See also 77 F.C.C.2d 384 (1980) and 88 F.C.C.2d 512 (1981), appeal pending sub nom., CCIA v. FCC, Case No. 80-1471 (D.C. Cir. 1980).

53. Authorization of Telenet and Tymnet to Provide Packet Switched Communication Between the U.S. and Europe, F.C.C. Doc. No. 82-377 (August 5, 1982).

54. See Uniform Settlement Rates on Parallel Routes, 84 F.C.C.2d 121 (1980). Although the FCC has at times explored revising or eliminating this policy, it has never resolved the problem of the "whipsawing" of U.S. carriers by overseas monopoly PTTs.

55. International Relay, 77 F.C.C.2d 819 (1980).

56. Consultative Committee on International Telephone and Telegraph of the International Telecommunications Union.

57. Letter from Leon Burtz, Director, CCITT, to Mark Fowler, Chairman, F.C.C., June 20, 1980.

58. See Recommendations D.I and D.6 of the Consultative Committee on International Telephone and Telegraph, Orange Book, Sixth Plenary Assembly, 1977, Geneva. Recommendation D.I concerns the conditions under which leased lines are to be available and prescribes the terms of their use. D.6 addresses group user needs for leased lines when public networks cannot meet them. For some foreign telecommunication authorities, questions under study by the CCITT are premised on the assumption that such needs will ultimately be met by public networks. See question III/5, adopted by the VII Plenary Assembly for study in 1981-1984.

59. See note 54, supra.

60. Sweden, Norway, Denmark, Finland, and Iceland (NORDTEL); and Belgium, the Netherlands, and Luxembourg (BENELUX).

61. This author will address the legal and policy issues of transborder and regional satellite systems in a separate article, to be completed in 1983.

62. Application of Orion Satellite Corp., File No. C55-83-002-P (1983).

UNITED STATES LAWS AND REGULATIONS

Statutes

Communications Act of 1934, 47 U.S.C. §§151-609 (1976), 48 Stat. 1064 (1934).

Creation of FCC. Creates the Federal Communications Commission (FCC) and gives it power to regulate foreign commerce and communication by wire and radio. (47 U.S.C. §151)

Application of the Act. Applies statute to foreign communications by wire or radio and foreign transmission of energy by radio which originates or is received within the United States. (47 U.S.C. §152(a)) This statute does not apply, in certain circumstances, to communications between the United States and Canada and Mexico. (Pub. L. 95-234, §4-5)

Duties of carriers. Sets out duties of common carriers regarding interconnection with other carriers, establishment of routes and charges, and provisions of facilities and regulations for operating through routes. Requires that charges, classifications, and regulations be just and reasonable. Prohibits common carriers from discriminating in charges, classifications, facilities, or services. Sets out procedures for notice and inspection of charges, classifications, regulations, or practices. (47 U.S.C. §§201, 202, 203)

Hearings. Authorizes FCC to conduct hearings on revised charges, classifications, regulations, or practices, and to prescribe just and reasonable charges, classifications, regulations, or practices. (47 U.S.C. §§204, 205)

Prohibitions on carriers. Prohibits carriers, domestic or international, from constructing, extending, acquiring, or operating a line, or transmitting over such a line, without first getting a certificate of public convenience and necessity from the FCC. (47 U.S.C. §214(a))

Notification to State Department. Requires the FCC to notify the State Department of applications to provide service to foreign points. (47 U.S.C. §214(b))

Issuance of certificates. Authorizes FCC to issue certificates as applied for, to refuse them, or to put conditions on them, for all or a portion of a line. After issuance of a certificate the carrier is free to comply with its terms and conditions.
(47 U.S.C. §214(c))

Public convenience and necessity. Authorizes the FCC, after notice and opportunity for a hearing, on complaint or on its own initiative, to order carriers to provide themselves with adequate facilities for performance as common carriers in the interest of the public convenience and necessity. (47 U.S.C. §214(d))

Management of carriers' business. Authorizes FCC to make inquiries into the management of carriers' business, to require annual and other reports from carriers, and to prescribe forms for accounts and records to be kept by carriers. (47 U.S.C. §§218, 219, 220)

FCC control over foreign transmissions. Authorizes FCC to maintain the control of the United States over the channels of interstate and foreign radio transmissions through the issuance of licenses for limited terms, and to make reasonable regulations governing interference potential of devices which emit radio frequency energy so as to cause harmful interference to radio communications. (47 U.S.C. §§301, 302(a))

Classification of radio stations. Requires FCC to classify radio stations, prescribe the nature of service to be rendered by various classes of stations, assign bands of frequency to the various classes of stations and to individual stations, determine the location thereof, promulgate regulations on the apparatus to be used, regulate to prevent interference, and otherwise regulate with respect to radio communications. (47 U.S.C. §303)

Treaties. Radio or wire communications. Authorizes the FCC to prescribe restrictions on conditions necessary to carry out any international radio or wire communications treaty, convention, or regulation annexed to any agreement to which the U.S. is or may become a party. (47 U.S.C. §303m)

Conditions on international commercial communication. Authorizes FCC, in granting any license for a station intended to be used for commercial communication between the U.S. and any foreign country, to impose any terms, conditions, or restrictions set out in the Cable Landing License Act. (47 U.S.C. §308(c)) (See below.)

Aliens. Prohibits FCC from granting radio station licenses to aliens. (47 U.S.C. §310(a))
Prohibition on interception of signals. (47 U.S.C. §605) (See Ch. VI.)

Cable Landing License Act of 1921, 47 U.S.C. §§34-39 (1976), 42 Stat. 8 (1921).

Prohibits the operation of submarine cables directly or indirectly connecting the United States with another country without a written license from the President. Sets out terms of the license and penalties. (47 U.S.C. §§34-39.) (Executive Order No. 10530, Part 4, §5A, 3 C.F.R. §68, delegates this power to the FCC.)

Cables to Alaska, 47 U.S.C. §17 (1976), 31 Stat. 206 (1900).

Prohibits cable lines owned, operated, or controlled by foreigners to enter Alaska. (47 U.S.C. §17)

Communications Satellite Act of 1962, 47 U.S.C. §701, et. seq. (1976), Pub. L. No. 87-624, 76 Stat. 419 (1962).

Purpose. Sets out U.S. policy to establish, in conjunction with other countries, a commercial communications satellite system, as part of an improved global communications network. (47 U.S.C. §701(a))

Objectives of satellite program. Requires that, in developing satellite programs, there will be special attention services to developing countries, to efficient use of spectrum, and use of technology to lower costs and improve service to users. (47 U.S.C. §701(b))

Corporate status. Requires U.S. to establish a private corporation, subject to government regulation, to facilitate development of the service. (Comsat designated, see below.) (47 U.S.C. §701(c))

Additional systems. Creates additional satellite systems not precluded, if required in the national interest (to be determined by the FCC). (47 U.S.C. §701(d))

Functions of government. Gives the President the powers to establish a program for the operation of a commercial communications satellite system; to provide for review of the system; to coordinate concerned agencies' interests; to supervise foreign relations; to ensure the government's use of the system; and to help attain compatibility with existing domestic and foreign facilities. Authorizes NASA to provide technical advice, research and development assistance, and other technical services on a reimbursement basis. Requires the FCC to make rules and

regulations to ensure effective competition in procurement, guard against discriminatory use of the system, establish compatible communications between domestic and foreign points, and to oversee ratemaking procedures, technical characteristics, financing, authorizations, corporate shares and additions. (47 U.S.C. §721)

Comsat creation. Creates Comsat as a private, for profit corporation. (47 U.S.C. §731)

Comsat authorization. Authorizes Comsat to plan and operate, by itself or with foreign governments or firms, a commercial communications satellite system; to lease channels to U.S. common carriers and other foreign or domestic entities; and to own and operate satellite terminal stations (earth stations). (47 U.S.C. §735(a))

Common carrier status. Deems Comsat a common carrier within section 3(h) of the Communications Act of 1934, and subject to Titles I and II of that Act. (47 U.S.C. §741)

International Maritime Satellite Telecommunications Act of 1978, 47 U.S.C. §751, et. seq. Pub. L. No. 95-564, 92 Stat. 2392 (1978).

Purpose. Congress states necessity for United States to participate in INMARSAT in order to have a global satellite system to serve the maritime commercial and safety needs of the United States and foreign countries. United States participation in INMARSAT to be through Comsat. (47 U.S.C. §751(a))

Comsat as representative. Comsat is the sole operating entity of the United States in INMARSAT, but can participate on an interim basis with any other maritime satellite system, subject to certain statutory requirements. For this purpose, Comsat may own and operate satellite earth terminal stations in the United States, interconnect them with domestic and international common carriers, except for those owned by Comsat, and interconnect with private communications systems in the national interest. (47 U.S.C. §752(a), (b) and (c))

Earth station ownership. Requires FCC to authorize INMARSAT earth terminal station ownership, except in circumstances indicated in sections (e)(1) and (2). The FCC may authorize ownership by others than Comsat in the public interest. (47 U.S.C. §752(e)(3))

Functions of government. Makes the Secretary of Commerce responsible for coordinating activities of Federal agencies regarding INMARSAT, assuming international efficient use of electromagnetic spectrum, orbital space, and technical compatibility, and for understanding the interests and needs of

ultimate users. Requires the President to issue instructions to Comsat regarding its role in INMARSAT and with foreign entities, consistent with the national interest and U.S. foreign policy. Sets out FCC's regulatory functions and mandates continuing review of Comsat activities. (47 U.S.C. §753(a), (b), (c), and (d))

Record Carrier Competition Act of 1981, 47 U.S.C. §222, Pub. L. No. 97-130, 95 Stat. 1687 (1981).

Competitive markets. Makes the FCC responsible for promoting the development of fully competitive domestic and international markets for record carrier service, and requires FCC to forbear from regulating record carriers as warranted by increases in competition. (47 U.S.C. §222(b)(1))

Nondiscriminatory interconnection. Requires record carriers to permit nondiscriminatory interconnection for other record carriers under certain circumstances and with certain conditions set out in the statute. Requires FCC to intervene where the carriers cannot reach an agreement as to rates for interconnection and to establish an agreement to which the parties must adhere. (47 U.S.C. §222(c)(1)(A)(i))

Termination. At the end of 36 months (Dec. 29, 1984), Title 47 of the U.S. Code, section 222(c) terminates, except for subsection (c)(1)(B). FCC regulatory responsibilities cease, except for those requiring the FCC to treat record carriers offering both domestic and international services separately for purposes of administering interconnection requirements. (47 U.S.C. §222(e)(1))

Administrative Procedure Act, 5 U.S.C. §§551-5999, 701-06, 1305, 3105, 3344, 5362, 7521 (1946).

Regularizes the law of formal adjudication, rulemaking and judicial review, and governs administrative process with respect to U.S. government agencies, including the FCC.

Department of State Authorization Act, Fiscal Years 1982 and 1983, Pub. L. No. 97-241, 96 Stat. 273 (1982).

Deals with certification of private sector delegates to international conferences. Exempts a private sector representative asked to be the spokesperson for the U.S. delegation to an international

telecommunications meeting or conference from the provisions of Title 18 of the U.S. Code, sections 203, 205, 207, and 208, which generally prohibit a government employee from advancing personal financial interests. In order to exempt the private sector representative, the Secretary of State must certify that no government employee in the delegation is as well qualified to represent the U.S. telecommunications interests. (Pub. L. No. 97-241, §120)

Freedom of Information Act (FOIA), 5 U.S.C. §552 (1966), Pub. L. No. 89-554, 80 Stat. 383 (1966), amended 1967, 1974, 1976, and 1978. (See note following 5 U.S.C. §552.)

Purpose. Allows citizens to gain access to information held by the government. However, the act contains 9 exemptions from required disclosure.

Obligations respecting private sector records. One exemption protects trade secrets and confidentiality of obtained commercial or financial information. (47 U.S.C. §552(b)(4))

Government in the Sunshine Act, 5 U.S.C. §552b, Pub. L. No. 94-409, 90 Stat. 1241 (1976).

Purpose. Requires every official business meeting of a collegial agency, including major regulatory agencies, to be open to public observation. There are 10 exemptions, six of which are identical to FOIA exemptions.

Regulations

FCC. General rules of practice and procedure. 47 C.F.R., Parts 1, 1.1, et. seq.

Hearing procedures. 47 C.F.R. §1.201, et. seq.

Rulemaking procedures. 47 C.F.R. §1.399, et. seq.

Complaints, applications, tariffs, and reports involving common carriers. 47 C.F.R. §1.701, et. seq.

Ex parte presentations. General. 47 C.F.R. §1.1201.

Prohibited ex parte presentations. 47 C.F.R. §1.1221.

Procedures for handling ex parte communications. 47 C.F.R. §1.1241.

Rules, tariffs, and supplements. 47 C.F.R. §61.51, et. seq.

Furnishing of facilities to foreign governments for international communications. 47 C.F.R. §64.301.

Extension of lines and discontinuance of service by carriers. General provisions. Relates to all applicants under 47 U.S.C. §214, 47 C.F.R. §63.50.

Extension of lines and discontinuance of service by carriers. Extensions and supplements. 47 C.F.R. §63.01, et. seq.

FCC. Meeting procedures. 47 C.F.R. §0.601, et. seq.

Public information and inspection of records. 47 C.F.R. §0.441.

Disclosure to other Federal government agencies of information submitted to the FCC in confidence. 47 C.F.R. §0.442.

Inspection of records. 47 C.F.R. §0.451, et. seq.

Implementation of Computer II. 47 C.F.R. §64.702. Implements 47 U.S.C. §§154, 201-205, 403, 404, 410.

International fixed public radio communications services. 47 C.F.R., Part 23. Implements 47 U.S.C. §§154, 301, 303. Technical regulations regarding international fixed public radio communication.

Extension of lines and discontinuance of service by carriers. 47 C.F.R., Part 63. Implements 47 U.S.C. §214.

Satellite communications. 47 C.F.R., Part 25. Implements 47 U.S.C. §§701-744, unless otherwise noted.

Comsat procurement regulations. 47 C.F.R. §25.151, et. seq. Public notice of invitations to bid. 47 C.F.R. §25.169.

Uniform system of accounts for radiotelegraph carriers. Implements 47 U.S.C. §§154, 219, 220. 47 C.F.R., Part 34, unless otherwise noted.

Uniform system of accounts for wire-telegraph and ocean-cable carriers. 47 C.F.R., Part 35. Implements 47 U.S.C. §§154, 219, 220.

Cable License Landing Act. Delegation of authority from the President to the FCC. 3 C.F.R. §68. (See Executive Order No. 10530, §5A.)

COURT DECISIONS AND ADMINISTRATIVE ACTIONS

U.S. Court Decisions

FCC v. RCA Communications, Inc., 346 U.S. 86 (1953). Would not sustain FCC's authority to authorize a radiotelegraph company which served 39 overseas points to open two new circuits to Portugal and the Netherlands. FCC had granted request on grounds that this would foster U.S. national policy of competition. Court said that the FCC was required to use a public interest standard and not just to encourage competition.

Hawaiian Telephone Co. v. FCC, 498 F. 2d 771 (D.C. Cir. 1974). Remanded with new directions. Reviewed FCC order granting authority to a corporation to provide private-line, voice-only telephone service between Hawaii and Mainland United States. Held that the FCC, in evaluating the application, considered the factor of "competition" improperly because it did not primarily consider the public benefit, but focused on the objective of equalizing competition among the competitors, a standard that is beyond the statutory authority of the FCC.

U.S. v. FCC, 652 F.2d 72 (D.C. Cir. 1980) (the S.B.S. case). Held that even if the entry of a joint venture into the domestic satellite communications field were anticompetitive, the venture should be allowed where the public benefit from the venture outweighed any possible anticompetitive effects.

ITT World Communications v. FCC, 635 F.2d 32 (2d Cir. 1980). Court vacated FCC order allowing Western Union entry into international markets in response to a petition by three IRCs to review the order which allowed a domestic telegraph company to operate an overseas service. (This holding has been made moot by passage of the Record Carrier Competition Act of 1981, but is of historical importance.)

Western Union v. FCC, 665 F.2d 1126 (D.C. Cir. 1981). Affirmed competition in telex and telegraph.

U.S. v. AT&T, 552 F.Supp. 131 (D.C.D.C. 1982). Accepted the agreement of the parties to modify the 1956 Consent Decree under which AT&T had been banned from offering other than basic telephone services. Under the modification, AT&T can offer enhanced services through an arms-length subsidiary. The modification also required that AT&T be restructured, and that its local operating companies be divided into seven regional companies and become totally independent of AT&T.

Computer and Communications Industry Association v. FCC, 693 F.2d 198 (D.C. Cir. 1982). Review of Second Computer Inquiry R. and O. of FCC. Court found regulatory scheme set out by FCC in 77 F.C.C.2d 384 (1980), 84 F.C.C.2d 50 (1980), and 88 F.C.C.2d 512

(1981), to be reasonable and within the FCC's authority under the Communications Act of 1934. (See FCC decision below.)

Western Union International v. FCC, 673 F.2d 539 (D.C. Cir. 1982). Affirmed International Dataphone. Held that the FCC's authorization of both the telephone company and international record carriers to provide international dataphone-type services appropriately advanced the public interest by permitting cost-effective use of existing facilities to fill demonstrated needs promptly. Also held that the telephone company's entry into the international data transmission market did not have to be attended by immediate, comprehensive orders on "full" interconnection between IRCs and domestic telephone system, but rather that the FCC permissibly deferred comprehensive solution to the interconnection issue.

ITT World Communications, Inc. v. FCC, (D.C. Cir., Case Nos. 80-1721, 2324, 2401) and appeals from U.S. District Court for D.C. (D.C. Civil Action No. 80-0428) (1983). Affirmed District Court's finding that consultative process meetings of the Telecommunications Committee with representatives of foreign administrations were subject to the Government in the Sunshine Act and that further participation of the Telecommunications Committee in the consultative process be done only under a proper and precise delegation of authority from the FCC.

FCC Proceedings

Industry Restructure

Comsat Study. 77 F.C.C. 2d 564 (1980). Final R. and O. FCC adopted study of Comsat structure for submission to Congress pursuant to statute as the FCC's current views of issues on the corporate structure and operations of Comsat. Report was prepared by FCC staff.

Comsat Structure Proceeding. 81 F.C.C. 2d 287 (1980). NPRM. Considered recommendations in Comsat study above.

Comsat Corporate Structure. 90 F.C.C. 2d 1159 (1982). Clarified previous FCC rulings that Comsat may extend its business beyond its role as a carrier's carrier and compete in a full range of services, so long as its monopoly INTELSAT/INMARSAT functions are not impaired. FCC requires that if Comsat wants to provide more than it provides now, it must do so through a separate subsidiary. Requires Comsat to submit a report within 90 days addressing specific questions of restructuring. (Report of Communications Satellite Corporation on Information Flow and Licensing Procedures, CC Doc. No. 80-634, December 13, 1982; Report of Comsat on Allocation of Costs of Shared Services and Comsat Laboratories, January 24, 1983. Requested additional information in a letter to Comsat on April 1, 1983.)

GTE Telenet and Tymnet. Authorizations to Provide Packet Switched Communication Between United States and Western Europe (Application of Computer II to International Service), F.C.C. Doc. No. 82-377 (ordered August 5, 1982). Affirmed a staff action authorizing GTE Telenet and Tymnet to provide international packet-switched services. The FCC explicitly stated that the program of deregulation set out in Computer II applied uniformly to both domestic and international services. (Appeal filed.)

International Gateways. 76 F.C.C. 2d 115 (1979), appeal docketed sub nom., Western Union Telegraph Co. v. FCC, No. 79-1352 (D.C. Cir. Apr. 2, 1979), consolidated with, Western Union Telegraph Co. v. FCC, No. 79-2494 (D.C. Cir. Dec. 14, 1979). Authorized IRCs to operate from numerous points within the United States, rather than from a limited number of designated gateways. Granted permission to interconnect with domestic carrier. Note: she has free instead of for justification for expanded scope of operations and gave direct access.

Interface of International and Domestic Telex and TWX Services. 76 F.C.C. 2d 61 (1979, 1980). R. and O. & further NPRM. Adopted a policy whereby all common carriers engaged in the provision of international telex service are required to interconnect with each other upon demand for each interconnection. Also, FCC requires that upon demand any common carrier engaged in the provision of international telex service is required to interconnect to any domestic carrier providing a telex compatible service for the purpose of providing joint through international telex service.

Graphnet Systems, Inc. 63 F.C.C. 2d 402 (1977). Granted application for authority under §214 of Act to provide specialized data communication services to overseas points by domestic interconnection with foreign information transmitting networks. FCC will entertain any other applications to further enhance overseas data communication services.

Graphnet Systems, Inc., rec. denied, 67 F.C.C. 2d 1020 (1978). (See 595 F.2d 897 (1979).) Previous findings regarding need for specialized data communication service interconnection with foreign information transmission networks reaffirmed. Authorization for two carriers modified to limit one to facsimile communication services and the other to packet-switched data communication services.

Earth Station Ownership. 5 F.C.C. 2d 812 (1966). Established a formula to apportion the shares to each USISC on the basis of what it is permitted to invest. Finds most logical and equitable formula, in principle, to be based on relationship of ownership of earth station to use. Designates Comsat to manage earth stations in order to operate entire complex as a unit. Sets up earth station ownership committee (ESOC), composed of 7 USISC'S.

Earth Station Ownership. 8 F.C.C. 2d 406 (1967). Application of Comsat, AT&T, ITT, RCA, and WUI jointly to construct an earth station. Found the parties legally, financially, and technically qualified

to construct and own the earth station, subject to certain technical requirements, but maintained jurisdiction over the joint agreement to require conformance to the public interest.

Ownership and Operation of Earth Stations. 90 F.C.C. 2d 1458 (1982). NOI. Requested public comment on alternatives for modifying current U.S. policy on ownership and operation of U.S. earth stations that operate with the INTELSAT system. FCC is examining possibility for U.S. earth station ownership other than through existing arrangements. Earth station ownership and operation, established under the Satellite Act of 1962, has in fact been confined to Comsat and the IRCs under an arrangement of the Earth Station Owners' Committee (ESOC).

Direct Access to INTELSAT. 90 F.C.C. 2d 1446 (1982). NOI. Inquiry into the alternatives for modifying its current policy on access by U.S. International Service Carriers (USISCs) to INTELSAT space segment facilities. Currently FCC gives Comsat, as U.S. signatory to INTELSAT, exclusive U.S. control over these facilities and requires that USISCs obtain access pursuant to tariffs filed by Comsat.

Implementation of INMARSAT Act. 91 F.C.C. 2d 245 (1982). Adopted a policy which will permit firms other than Comsat to own future shore stations accessing the INMARSAT space segment if these firms make a showing that their ownership is in the public interest. FCC also finds that Comsat's proposal to combine for rate setting purposes the expenses of its INMARSAT and INTELSAT revenue requirements is not in the public interest.

Western Union Reentry into the International Record Communications Market. F.C.C. Doc. No. 82-378. Ordered August 5, 1982. Authorized the Western Union Telegraph Company to reenter the international record telecommunications market. (It had been foreclosed by section 222 of the Communications Act of 1934 which was amended by the Record Carrier Competition Act of 1982, see above.) FCC authorized WU to provide direct service between the United States and six foreign countries.

Consortium Communications International, Inc. 76 F.C.C. 2d 15 (1979) and International Relay, Inc. (IRI). 77 F.C.C. 2d 819 (1980). Mem. Op. and O. Authorized these carriers, in addition to the traditional IRCs, to provide international telecommunications service as part of its pro-competitive policies. FCC held that services offered were "communications" and therefore subject to its jurisdiction. Disputed service involves computer routing of messages to London by direct-dial telephone or international data circuits.

Facilities Planning - Consultative Process

North Atlantic. Policy to be Followed in Future Licensing of Facilities for Overseas Communications. 30 F.C.C. 2d 571 (1971). Statement of Policy and Guidelines. Established the initial set of policies governing the North Atlantic Facilities Planning Process (for undersea cables and satellites). Carriers to use guidelines to plan in association with foreign administrations for transatlantic facilities for the balance of the 1970's. Considerations include: 1) promotion of continued development of both cable and satellite technologies and their effective and timely application to meet future requirements for international service; 2) authorizing the most modern and effective facilities available via both satellite and cable; 3) minimizing need for imposing artificial formulae to govern distribution of traffic among available media; and 4) charging for service to reflect economies available from each advance in service.

North Atlantic. Same. 62 F.C.C. 2d 451 (1976). Further Statement of Policy and Guidelines. Planning until 1985. Additional policies to 1971 statement. Considerations include: 1) FCC policy is not to favor one technology over another but to achieve the most efficient utilization of facilities at lowest possible cost; 2) FCC to continue to scrutinize the facility and utilization proposals of all USISCs prior to authorizing participation in facilities programs in order to achieve these goals; and 3) FCC to evaluate all authorizations for major new facilities in the context of a comprehensive long-range plan to establish and use facilities in a particular geographic area for a specified future planning period.

North Atlantic. Same. 67 F.C.C. 2d 358 (1977). R. and O. and Third Statement of Policy and Guidelines. Found that the planning process between USISCs and foreign administrations has not resulted in mutually acceptable plans, and consequently unilaterally authorizes the installation and operation of certain facilities.

North Atlantic. Policies to be Followed in the Authorization of Common Carrier Facilities to Meet North Atlantic Telecommunications Needs During the 1985-1995 Period. 84 F.C.C. 2d 760 (1981). Found that 1) INTELSAT VI series designs are acceptable; 2) no new cable systems are likely to be required before 1988; 3) a fiber optic, digital cable should be introduced as early as 1988; 4) an additional analogue cable will be considered as an acceptable option only if there are unacceptable delays in developing fiber-optic cable and INTELSAT VI; 5) if an analogue cable is approved, date for introduction of fiber-optic cable will be reassessed; and 6) consideration of the appropriate method for distrusting traffic among facilities, restoration of service in case of major facility failure, and the specific configuration of facilities to be deferred.

Pacific Basin. Inquiry into Policies to be Followed in Authorization of Common Carrier Facilities to Meet Pacific Telecommunications Needs During the Period 1981-1995. NOI. Released December 3, 1982. CC Doc. 81-343, F.C.C. Doc. No. 81-243. Developed policies and guidelines

for the construction and use of cable and satellite transmission facilities to meet future demands for common carrier services in the Pacific Ocean region. Initiated a comprehensive planning process for the Pacific Region. NOI focuses on: past FCC policies with respect to facilities utilization in the Pacific region; scope of issues to be considered in the inquiry and criteria for evaluating alternative facilities configuration and use options; and the proposed planning process.

Caribbean Basin. Application of IRCs for Authorization Under section 214 of the Communications Act to Construct and Operate a Submarine Cable System between the Continental United States and St. Thomas, U.S. Virgin Islands. 88 F.C.C. 2d 1630 (1982). Mem. Op. and O. and Authorization. Required monthly circuit-status reports for Caribbean and South American Region beginning with the year-end 1981 data in order to maintain a complete picture of regional facilities use on an ongoing basis. Also, order authorizes number of specific acquisitions and requests for construction.

Pacific Basin. Inquiry into the Policies to be Followed in the Authorization of Common Carrier Facilities to Meet Pacific Telecommunications Needs During the Period 1981 - 1995. 89 F.C.C. 2d 1205 (1981, 1982). NPRM. Found that existing facilities in place in 1986 will be unable to provide sufficient capacity to satisfy forecasted demands for international services between the United States and Pacific points in that year. Tentatively concluded that the masterplan approach to development of a circuit distribution methodology for the mid-1980's is acceptable if the plan developed (1) generally reflects the optimal service quality properties of a balanced loading circuit distribution; (2) gives due consideration to the costs to ratepayers; and (3) includes a specific mechanism to deal with deviations from forecasted traffic levels. Also, tentatively concluded that the USIRCs should be exempted from a specific circuit distribution methodology because of the existence of customer preferences for cable or satellite circuits.

Pacific Basin. Inquiry into the Policies to be Followed in the Authorization of Common Carrier Facilities to Meet Pacific Telecommunications Needs During the Period 1981-1995. CC Doc. No. 81-343, F.C.C. Doc. No. 82-513. Released December 3, 1982. R. and O. Authorized the United States to acquire certain facilities, and authorized certain other carrier requests under the NPRM. (See above.) Continues delegation of authority to Chief, Common Carrier Bureau, and his staff to meet with parties and interested persons regarding aspects of the NOI, not addressed in R. and O., and regarding other matters relating to Pacific Ocean region facilities planning, and to require submission of information relevant to those discussions.

International Service Providers

Transborder Satellite Video Services. 88 F.C.C. 2d 258 (1981). Decided that it had authority to authorize use of domestic satellites for transborder service, and that provision of transborder satellite services between the United States and Canada, Central America, and the Caribbean did not violate the INTELSAT agreement if they did not cause INTELSAT the economic harm contemplated in Art. XIV(d) of the INTELSAT agreement. (This opinion was rendered following a letter from James L. Buckley, Undersecretary of State for National Security, Science and Technology, to the Chairman of the FCC, Mark Fowler, July 23, 1981. The letter, representing the consensus of the Senior Interagency Committee on Communications and Information Policy requested that the FCC approve pending applications to use domestic satellites to provide international service in designated geographical areas on the condition that the State Department would seek approval from the host countries and INTELSAT prior to and as a condition precedent to the inauguration of such service in those areas.)

International Voice and Data Traffic

AT&T International DATAPHONE. 75 F.C.C. 2d 682 (1979, 1980), appeal docketed sub nom., Western Union International, Inc. v. FCC, No. 80-1286 (D.C. Cir. Mar. 11, 1980). Mem. Op. and O. Permitted AT&T to offer DATAPHONE services internationally. AT&T granted authority to use its MTS (regular telephone services) for dataphone service between U.S. and foreign points, but not as a separate service and only at regular MTS rates. Prohibited from enhancement of its non-voice service capacity. Removes artificial restriction on public use of regular telephone service to transmit data during overseas calls and is in the public interest.

DATEL Services. Western Union Int. and RCA Global Commun. AVD and Interconnection with Domestic Networks. 76 F.C.C. 2d 166 (1979, 1980), appeal docketed sub nom., RCA Global Communication, Inc. v. FCC, No. 80-1310 (D.C. Cir. June 1, 1980, consolidated with Dataphone, above). Mem. Op. and O. Lifted restrictions on voice traffic over IRC facilities to the extent that this traffic was a secondary use. IRCs' applications for modification of existing authorization to permit switched record or data services between U.S. mainland and overseas point, and to remove data-only restrictions to permit alternate voice communications granted with conditions and "limited voice use" restrictions upon IRCs' Datel offerings removed.

TAT-4. Overseas Communications Services. (CC Doc. No. 80-632, F.C.C. Doc. No. 82-547, adopted December 8, 1982). Reversed the TAT-4 decision which prohibited AT&T from providing record (including data) services in the international market. Also, permitted IRCs to enter voice services in the international market. Stay granted pending

review by U.S. Court of Appeals, D.C. Circuit Appeal filed March, 1983, sub nom., TRT v. FCC, Case No. 83-1193.

Authorized User

Spanish International Network (SIN) (Broadcast Authorized User). 70 F.C.C. 2d 2127 (1978), appeal sub nom., ITT World Communications, Inc. v. FCC, No. 79-1046 (D.C. Cir., May 11, 1979). R. and O. Discussed policy changes to facilitate efficient international television program transmission services. Comsat is ordered to file for provision of satellite television services directly to U.S. earth station users; other common carriers are ordered to apply for removal of conditions regarding rotational arrangements for television service. Permits SIN to receive international television programming from Comsat and grants SIN's petition to change policy as it applies to other similarly situated television customers so that they may receive direct service from Comsat. (SIN is a domestic corporation involved primarily in the distribution of Spanish language programming to affiliated U.S. broadcasters.)

Authorized User - Common Carrier. Comsat Authorized to Compete with International Carriers for Overseas Traffic, Proposed Modifications of Authorized User Policy, 90 F.C.C. 2d 1394 (1982). FCC has lifted its requirement that Comsat function only as a carrier's carrier and has allowed it to serve the public directly at all U.S. international earth stations. Stay granted pending appeal to U.S. Court of Appeals, D.C. Circuit. (RCA v. FCC, Case No. 83-1241, March 7, 1983; WUI v. FCC, Case No. 83-1244, March 7, 1983; ITT v. FCC, Case No. 83-1245, March 8, 1983; TRT v. FCC, Case No. 83-1247, March 8, 1983).

Foreign Ownership

FTC Communications Reorganization. 71 F.C.C. 2d 393 (1979). Application by foreign carrier to establish facilities for provision of authorized IRC services from San Francisco and Washington, D.C. denied. Reciprocity would not be accorded by France for U.S. entities and since the applicant is controlled by foreign government it is not entitled to be treated like a U.S. carrier.

FTC Communications Reorganization. 75 F.C.C. 2d 15 (1979). Approved an application by FTC Commissions for transfer of control from the French government to a U.S. corporation, and vacated its earlier denial of FTC's application.

Alien Ownership of Cable Systems. 77 F.C.C. 2d 73 (1980). Mem. Op. and O. Amendment of Parts 76 and 78 of the Commission's Rules to Adopt General Citizenship Requirements for Operation of Cable TV

Systems for Grant of Station Licenses in Cable TV Relay Service. Upheld existing rules permitting ownership of cable TV systems in the United States. Denies proposed rule restricting alien ownership.

Rate Cases

Comsat Rate Case. 56 F.C.C. 2d 1101 (1975). R. and O. Examined the elements that should be included in Comsat's rate base, its accountable rate of return, and its rate structure as part of a review of the overall reasonableness of rates that Comsat charges for services. Required Comsat to reflect distance-insensitive costs, but allows it also to reflect the true cost differential in its rates.

Comsat Rate Case. 68 F.C.C. 2d 941 (1978). Commission accepted a proposal by Comsat which will cause substantial rate reductions, and will eventually make the economic benefits of satellite technology available to the public.

International Audit and Study. 75 F.C.C. 2d 726 (1979, 1980), appeal docketed sub nom., Western Union Telegraph Co. v. FCC, No. 79-2497 (D.C. Cir. Dec. 14, 1979). Staff study of voice and record international carriers' rates. Found current cost manual ineffective and that it lacked access to accurate information compiled by the carriers. Directed Chief, Common Carrier Bureau, to take appropriate action regarding FCC's accounting rules.

ITT World Communications, Inc. Rate of Return. 82 F.C.C. 2d 282 (1980). Mem. Op. and O. Initiated an evidentiary hearing to determine a reasonable rate of return for IRCs, based on staff findings set out in International Audit and Study above that IRCs rates of return are in excess of the authorized level. (Investigation terminated in 88 F.C.C. 2d 701 (1981).)

Uniform Settlements on Parallel International Communications Routes. 66 F.C.C. 2d 359 (1977). Mem. Op. and NPRM. To determine whether a proposed non-uniform settlement agreement between the U.S. IRCs and foreign administrations will have adverse public consequences and outweigh the ostensible public benefits, what particular information should be submitted, and whether it should be submitted confidentially.

Uniform Settlements on Parallel International Communications Routes. Mem. Op. and O. 84 F.C.C. 2d 121 (1980). Required uniform accounting and settlement rates and division of tolls. Policy exists to protect U.S. carriers from making concessions which may ultimately be detrimental to U.S. ratepayers.

Resale and Shared Use

Resale and Shared Use of Common Carrier Services and Facilities (Domestic). 60 F.C.C. 2d 261 (1976). Recon., 62 F.C.C. 2d 588 (1977), aff'd sub nom., AT&T v. FCC, 572 F. 2d 17 (2d Cir. 1978), cert. denied, 439 U.S. 875 (1978). On reconsideration, the FCC modified earlier R. and O. requiring unlimited resale and sharing of private line services and facilities to exclude international services and facilities. FCC eliminated the requirement that a carrier providing a monopoly service may provide resale only through a separate corporation.

Regulatory Policies Concerning International Resale and Shared Use of Common Carrier International Communication Services. 77 F.C.C. 2d 819 (1980). NOI. Shared use and resale has not been permitted by IRCs to date, and is considered by most foreign administrations to be in violation of CCITT recommendations to which they adhere. The FCC has not followed through on this NOI, and it remains a pending docket.

Relevant Domestic Rulings

Second Computer Inquiry. 77 F.C.C. 2d 384 (1980), modified on recon., 84 F.C.C. 2d 50 (1980), modified on further recon., 88 F.C.C. 2d 512 (1981). (Released 1980.) Second R. and O. Focused on regulatory issues emanating from the greater utilization of computer processing technology and its varied market applications. Amended regulations (47 C.F.R. §64.702) to address the provision of enhanced services and customer-premises equipment. Carriers under direct or common control of AT&T and GTE are required to offer enhanced services and customer-premises equipment through separate corporate subsidiaries. The provision of enhanced services is not subject to regulation. The offering of customer-premises is not a common carrier activity and is severable from the provision of common carrier transmission services. Requires common carriers to detariff all customer-premises equipment.

Establishment of Domestic Satellite Facilities by Non-Governmental Entities. 22 F.C.C. 2d 86 (1970). National public interest served by consideration of applications for domestic communications satellite systems which involve certain coalitions. Additional rule makings on this subject follow.

Same. 35 F.C.C. 2d 844 (1972). Second R. and O. Opted for multiple entry of firms into Comsat market, but not unlimited or unrestricted entry. Requires some statutory showings as for other common carriers, as well as: (1) a reasonable showing by current providers of essential services that the new service will not be a burden to customers of these services; (2) showings particular to AT&T, Comsat or GTE; and (3) showings particular to other system applicants and satellite equipment suppliers. Objective is to aim toward permitting a variety of

earth station ownership patterns and to afford diverse access to space segments, except where this is impractical.

Same. 38 F.C.C. 2d 665 (1972). Mem. R. and O. Stated findings in 6 petitions for reconsideration or clarification of Second R. and O. (above) with regard to obligations of specific applicants to establish domestic system.

Regulatory Policies of Domestic Public Message Services by Entities Other Than Western Union Telegraph Company. 84 F.C.C. 2d 930 (1981), appeal docketed sub nom., Western Union International, Inc. v. FCC, No. 80-1937 (D.C. Cir. Aug. 11, 1980), consolidated with, ITT World Communications, Inc. v. FCC, No. 79-1046 (D.C. Cir. Jan 19, 1979). Eliminated WU's domestic telegraph monopoly. Bilateral agreements between Western Union and TRT and Western Union and FTC for the distribution of unrouted international message telegraph traffic rejected as inconsistent with the requirements of section 222(e) of the Act. Interim international formula to remain in effect pending further proceedings. (78-96)

Competitive Common Carrier. 85 F.C.C. 2d 1 (1980). First R. and O. Classified common carriers on basis of their power in the marketplace.

Competitive Common Carrier. 91 F.C.C. 2d 59 (1982). Second R. and O. Updated 85 F.C.C. 2d 1, above. Moves to eliminate unnecessary regulation of reseller in order to provide possibility for greater diversity of services more rapidly at lower rates. Resale carriers no longer need to adhere to entry or exit requirements of section 214 of the Communications Act or tariff filing requirements of section 203.

Direct Broadcast Satellites. 90 F.C.C. 2d 676 (1982). R. and O. Interim policy. Interim authorization found in the public interest because of the additional video service that DBS could provide. FCC orders that temporarily DBS operate in the frequency band of 12.2 - 12.7 GHz for downlinks and 17.3-17.8 for uplinks. Sets out regulations to prescribe the manner in which parts of the radio frequency spectrum may be made available for the development of interim DBS. (See above, 47 C.F.R., Part 100.) Inquiry into the development of regulatory policy regarding DBS for the period following the 1983 RARC on DBS. (See Ch. II.)

Domestic Fixed-Satellite Transponder Sales. 90 F.C.C. 2d 1239 (1982) Mem. Op. and O. Answered questions raised at 88 F.C.C. 2d 1419 (1982), and found that the sale of domestic satellite transponders was a noncommon carrier activity. It also found that domestic satellite licensees are allowed to engage in transponder sales if judged to be within the public interest.

RCA Connection with ANIK Satellite(s). 54 F.C.C. 2d 976 (1975). Found that a major use of Canadian satellite facilities for domestic U.S. transmission is permissible when there is a short-term unavailability of adequate domestic facilities.

GTE Satellite Corp. 90 F.C.C. 2d 1009 (1982). Granted application to lease transponder capacity from Telesat Canada for domestic common carrier services on a temporary basis pending availability for U.S. transponder capacity. Found that application fell within the intent of the 1972 intergovernmental agreement which calls for assistance when one country has a shortage of adequate facilities. (See Department of State Bulletin, Vol. LXVIII, No. 1754, pp. 145-8, November 8, 1972.)

Licensing of Space Stations in the Domestic Fixed-Satellite Service. I.C.C. Doc. No. 81-704, F.C.C. Doc. No. 83-184, adopted April 27, 1983, released August 16, 1983.) R. & O. Authorizes 2 degree orbital spacing of domestic satellites. Contains extensive discussion of international considerations.

Toroidal Antenna

Comsat - Toroidal Antenna. 90 F.C.C. 2d 1205 (1982). Shape of the reflector panel, a torus, enables the antenna to send and receive signals simultaneously to more than one satellite. Dismissed Comsat application to construct toroidal antenna because it would be able to transport domestic as well as international signals. Comsat as sole signatory to INTELSAT has been determined ineligible to hold a domestic common carrier license. Opinion suggests that an application by an appropriate Comsat affiliate or by other eligible domestic carriers to demonstrate the proposed technology would be consistent with U.S. domestic policy objectives.

TREATIES AND AGREEMENTS

Additional telecommunications treaties and agreements to which the United States is a signatory are referenced in U.S. Department of State, Treaties in Force on January 1, 1983. (See reference in Ch. I, Bibliography.)

Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty). January 27, 1967. 18 UST 2410, TIAS No. 6347, (effective January 27, 1967). (Entered into force for the United States October 10, 1967.)

Purpose. Ensures that exploration and use of outer space is carried out in the interests of all countries as the province of all mankind, and that all states are free to explore space without discrimination. (Art. I)

Jurisdiction. Outer space is not to be subject to claims of national sovereignty, and its exploration is to be carried on in accordance with international law in the interest of maintaining peace and security. Ownership of objects launched into outer space is not affected by their presence in outer space or by their return to earth. (Arts. II, III, VIII)

Responsibilities of parties. Parties (states) are to be responsible for national activities in outer space whether conducted by governmental or nongovernmental entities. Parties launching objects are liable for damage to another Party or its inhabitants by such object. (Arts. VI, VII)

Satellite Treaties & Agreements

Agreement Relating to the International Telecommunications Satellite Organization, INTELSAT. Done at Washington, D.C., August 20, 1971. Entered into force for the United States February 12, 1973. 23 UST 3813, TIAS No. 7532.

Establishment and activities. INTELSAT was established by the Parties (nations) entering into this agreement to develop and operate a space segment of the global commercial telecommunications satellite system. The agreement designates the sorts of entities within each Party that can enter into INTELSAT agreement and

Operating Agreement. INTELSAT is mandated to provide high quality, reliable, nondiscriminatory international public telecommunications services and domestic services so long as its principle objective is not impaired. (Arts. II, III)

Financing. INTELSAT was designated the owner of the INTELSAT space segment. Financial interest of signatories and basis for user fees set out. (Art. III)

Structure. Organs include:
Assembly of Parties - principle organ of INTELSAT, composed of all Parties to the agreement. Considers matters primarily of interest to the parties as sovereign states. (Arts. VI, III)

Meeting of Signatories. Composed of signatories (these may be Parties or their operational designees).

Considers and expresses its views on resolutions and recommendations of Assembly of Parties or Board of Governors, and expresses own views on amendments to Agreement, future programs, and other matters. Establishes general rules concerning approval of earth stations or access to space segment, allotment of space segment capacity, and rates for use of space segment on nondiscriminatory basis. (Arts. VI, VIII)

Board of Governors - responsible for design, development, construction, establishment, operation, and maintenance of the space segment, and for any other activities designated by the INTELSAT Agreement, Operating Agreement, or the Assembly of Parties. (Arts. VI, X) It is composed of Governors representing the Signatories according to formulas set out in the Agreement. (Titles VI, IX, X)

Executive Organ - responsible to Board of Governors. Director General serves as chief executive and legal representative of INTELSAT, to be appointed by the Board of Governors and confirmed by Assembly of Parties. (Title VI)

Procurement. Requires open international invitations to tender. (Art. XIII)

Rights and obligations of members. Parties, signatories, or individuals within a Party's jurisdiction desiring to acquire or use facilities separate from INTELSAT space segment facilities, either for domestic, international, public, or specialized telecommunications services are required to consult with INTELSAT. With respect to domestic and specialized services, upon consultation with the Parties, the Board of Governors is required to make a recommendation concerning the technical compatibility of these services and whether their use of radio frequency spectrum and orbital allotment is likely to interfere with existing or planned INTELSAT facilities. With respect to international facilities, parties are required to consult with the Assembly

of Parties through the Board of Governors to establish technical compatibility, operation of spectrum and orbital space, and to avoid significant economic harm to the INTELSAT system. The Assembly of Parties is required to make recommendations about technical, spectrum, and orbital concerns, and to assure that these facilities do not prejudice the ability of the INTELSAT system to establish direct links among all participants. (Arts. XIV, (c), (d), (e))

Annexes:

Annex A. Functions of Secretary General
Annex B. Functions of the Management Services Contractor and Guidelines of the Management Services Contract
Annex C. Provisions and Procedures Relating to Settlement of Disputes
Annex D. Transition Provisions

Operating Agreement Relating to the International Telecommunications Satellite Organization, INTELSAT. Washington, D.C., 1971. (Communications Satellite Corporation (Comsat) is a signatory for the United States.)

Sets out among the Parties or their designated entities the requirements for operating a satellite system, including the financial and revenue-related requirements, the allotments of space segment capacity, procurement rules, protection of inventions, dispute, settlement, liability, and withdrawal from INTELSAT.

Convention on the International Maritime Satellite Organization (INMARSAT). 31 UST 1, TIAS No. 9605. Done at London, September 3, 1976. Entered into force for the United States July 16, 1979.

Deals with relations between parties (states) and entities designated as signatories by parties. These are to be governed by domestic law; the party is required to give guidance to the entity but is not liable for its obligations. (Art. 4)

Establishment and purpose. INMARSAT was established simultaneously with the conclusion of the Operating Agreement signed by a competent entity within the jurisdiction of each party (state). INMARSAT is mandated to provide for the space segment necessary for improving maritime communications to improve distress and safety-of-life-at-sea communications, efficiency and management of ships, maritime public correspondence services, and radio determination capabilities. (Arts. 2, 3)

Financing. INMARSAT is financed by contributions of signatories (states or designated entites) in accordance with the Convention. (Art. 5)

Space segment. INMARSAT owns the space segment which is open for use by ships of all nations on conditions to be determined by the Council on a nondiscriminatory basis. (Arts. 6, 7)

Operating Agreement of the International Maritime Satellite Organization (INMARSAT). London, September 3, 1976. (The Communications Satellite Corporation (Comsat) is a signatory for the United States.)

Sets out among the parties the requirements for operating a Maritime Satellite System including capitalization, investment, financial adjustments, payment of utilization charges, revenues, settlement of accounts and disputes, debt financing, liability, withdrawal from INMARSAT, earth station approval, and utilization of the space segment.

Convention for the Establishment of a European Space Agency. May 30, 1975. Text reprinted in Space Law, pp. 183-248. Sub-Committee on Aeronautical and Space Sciences, U.S. Senate, 94th Congress, 2nd Session. Committee Print. December, 1976. GPO. (The United States is not a signatory.)

Provides and promotes, exclusively for peaceful purposes, cooperation among European States in space research and technology and their space applications with a view to their being used for scientific purposes and for operational space applications systems. (Art. II)

Agreement on the Establishment of the "Intersputnik" International System and Organization of Space Communications. Text in Space Law (see above), pp. 387-398. Moscow, USSR. November 15, 1971. (The United States is not a signatory.)

Insures cooperation and coordination among the parties of efforts in design, establishment, operation, and development of a satellite system which will include space segments which will be the property of Intersputnik, and earth stations which will be the property of the member states or their recognized operating administrations. (Arts. 2 and 4)

The Agreement of the Arab Corporation for Space Communications. Cairo, June 20, 1976. Text in Space Law (see above), pp. 399-416. (The United States is not a signatory.)

Provides and sets up an Arab Space Sector for general and specialized services in the field of telecommunications for all member states of the Arab League in accordance with technical and economic criteria accepted in the Arab and international quarters.

Interim EUTELSAT Agreement. Agreement on the Constitution of a Provision Telecommunications Satellite Organization. Done in Paris, France, May 13, 1977. Signatories are member Administrations of the European Conference on Posts and Telecommunications (CEPT) or Recognized Private Operating Parties (RPOAs) authorized by a member administration of CEPT.

Creation of interim EUTELSAT. Creates a provisional European satellite telecommunications organization to ensure the establishment, operation, and maintenance of the space segments of satellite telecommunications systems and to conclude necessary arrangements for this, particularly with the European Space Agency (ESA). (Art. 2)

Participation in space segments. Requires signatories to sign a Supplementary Agreement to assume all the obligations and responsibilities relating to the space segment which flow from the Agreement or the Supplementary Agreement, including financial obligations. (Art. 3)

Structure. Includes the following organs: Assembly of Signatory Parties; the ECS Council in charge of the ECS Space Segment; the MAROTS Council in charge of the MAROTS space segment; and the permanent General Secretariat under the direction of a Secretary General. (Art. 4) (Duties of these organs described in Arts. 5-9.)

Definitive organization of EUTELSAT. Requires the Assembly of Signatory Parties to submit a report with recommendations on the definitive provisions concerning the EUTELSAT organization. These purposes are to be consistent with the principles of the Interim Agreement; should allow all European Administrations to accede to the Agreement; shall safeguard investments of signatories; and shall include specified special provisions. Parties to Interim Agreement are to create a definitive organization as soon as possible, but until that time, Interim EUTELSAT is responsible for the Agreement and the Supplementary Agreements. (Art. 20)

Annexes: Interim EUTELSAT supplementary agreement (ECS)
Interim EUTELSAT supplementary agreement (MAROTS)
(See Ch. I.)

Exchange of Letters Concerning Provision of Transborder Fixed Satellite Telecommunications Services Between Canada and the United States by Means of Domestic Satellites. August 24, 1982. Implementation of Transborder Satellite Video Services, F.C.C. Doc. No. 81-492, for Canada and the United States.

The Agreement contains four principles: 1) Transborder fixed satellite services shall be provided jointly between the United States and Canada by authorized entities, and the satellite facilities of each country shall be used as appropriate; 2) Such satellite services shall be provided pursuant to appropriate arrangements concluded between the authorized entities in accordance with applicable governmental and regulatory approvals in each country; 3) Earth stations and related terrestrial facilities used in Canada shall be owned and operated by authorized Canadian entities, and such stations and facilities in the United States shall be owned and operated in accordance with U.S. law; and 4) Both governments continue to support the concept of the INTELSAT global system, are mindful of their obligations under the INTELSAT Agreement, and undertake to consult pursuant to Art. XIV of that Agreement before initiating transborder fixed satellite services. (Modification of agreement reached in an exchange of letters in 1972.)

Broadcast Treaties & Agreements

Inter-American Radiocommunications Convention. Done at Havana, Cuba, December 13, 1937. 53 Stat. 1576. Part II terminated. 3 Bevans 462, TIAS No. 5938. (Brazil, Canada, Columbia, Cuba, Chile, Dominican Republic, United States, Guatamala, Haiti, Mexico, Nicaragua, Panama, Peru, Uruguay, Venezuela.) Entered into force for the United States July 21, 1938 and April 17, 1939.

Purpose. Calls for periodical meetings to resolve, by common understanding, problems arising in radiocommunications in the American continent. (Art. 1)

Retransmissions. Requires parties to take measures to ensure that the programs transmitted by a broadcasting station may be retransmitted or rebroadcast, in whole or in part, by any other station without the previous authorization of the station of origin. Requires rebroadcasting station to announce at suitable periods during the retransmission the nature of the broadcast, the location, and official call letters of the station of origin. (Art. 21)

North American Regional Broadcasting Agreement. Final Protocol. Washington, D.C., November 15, 1950. 11 UST 413, TIAS No. 4460. (Canada, Cuba, Dominican Republic, U.K., and U.S.A.). Done at Washington, D.C., November 15, 1950. Entered into force for the United States, April 19, 1960.

Provides for the establishment of fair and equitable principles governing and regulating the common use of the broadcasting band in the North American region so that each country may make the most effective technical use of it with the minimum of interference between broadcasting stations. North American Region includes: Bahama Islands and Jamaica, Canada, Cuba, Dominican Republic, Haiti, Mexico, and the United States.

Submarine Cable Treaties

The Convention for the Protection of Submarine Cables. March 14, 1884, Paris, France. 24 Stat. 1424, 1 Bevans 89, 112, 114, TIAS No. 380, 380-1, 1 and 2, 380-3. Entered into force for the United States, May 1, 1888.

Applies outside territorial water, to all legally established submarine cables landed in the territories, colonies, or possessions of one or more of the contracting parties. Significant provisions include: where willful breaking of or injury to a submarine cable results in the interruption of telegraphic communication, it is a punishable offense and can also give rise to a civil action (Art. II); liability for accidental damages (Art. IV); safety to be observed in landing cables (Article III); and obligation of layer of cable to compensate fishing vessels suffering injury on account of the cable. (Arts. VI, VII)

Convention on the High Seas. 1958. 13 UST 2312, 2319-2320, TIAS No. 5200. Geneva, Switzerland, April 29, 1958. Entered into force for the United States, September 30, 1962.

Right to lay cable. Freedom of the high seas includes freedom to lay cables as recognized in principles of international law. All states are entitled to lay submarine cables on the bed of the high seas and states should pay due regard to cables already laid. (Arts. 2, 26)

Protection of cable. States are required to pass law to provide that willful injury to cables by ships is an offense, that cable owners are liable for damage to other cables caused in the process of laying or repairing cables, and to insure compensation of fishermen who lose or damage equipment to avoid hurting a cable. (Arts. 27, 28, 29)

Convention on the Continental Shelf. 1958. United Nations Conference on the Law of the Sea. Done at Geneva, April 29, 1958. 15 UST 471, TIAS No. 5578. Entered into force for the United States. June 10, 1964.

Provides that coastal states may not impede the laying or maintenance of cables on the continental shelf except to take reasonable measures regarding their own exploration rights.

RELEVANT ACTIVITIES OF KEY INTERNATIONAL ORGANIZATIONS

International Telecommunications Satellite Organization (INTELSAT)

Membership: 108 countries and associated operating entities. Some non-member nations use the system.

Structure: INTELSAT has a four-tier organizational structure as described under treaties above.

1) Board of Governors. Composed largely of representatives of those signatories of INTELSAT that individually, or in groups, are the major users of the system. Usually meets four or five times a year. The Board of Governors is responsible for all decisions concerning the design, development, construction, establishment, operation, and maintenance of the INTELSAT space segment and for the decisions necessary to carry out any other activities undertaken by INTELSAT.

2) Meeting of Signatories. Composed of national telecommunications administrations or private sector telecommunications systems designated by governments representing the investors in INTELSAT. (Comsat is the U.S. representative.) Its twelfth annual meeting was held in Bangkok, Thailand, in April 1983. In general, it considers financial, technical, and operational issues brought before it by the Board of Governors.

3) Assembly of Parties. Composed of representatives of governments of INTELSAT member countries and normally meets every two years. The next Assembly will be held in October 1983, in Washington, D.C.

4) Executive Organ. A staff of about 400, headquartered in Washington, D.C., responsible to the Board of Governors for the management and operation of the INTELSAT system.

INTERNATIONAL TELECOMMUNICATION UNION (ITU).

(See description in Ch. II.)

UNITED STATES INTERNATIONAL SERVICE CARRIERS

American Telephone and Telegraph Company (AT&T)
195 Broadway
New York, New York 10007
Currently provides international telephone/voice service.
Recently authorized to provide record service.

FTC Communications, Inc.
90 John Street
New York, New York 10038
A subsidiary of Tymshare, Inc. Currently provides international record service. Recently authorized to provide voice service.

ITT World Communications, Inc.
320 Park Avenue
New York, New York 10022
Currently provides international telegraph/record service. Recently authorized to provide international voice service.

RCA Global Communications, Inc.
60 Broad Street
New York, New York 10004
Currently provides international telegraph/record service. Recently authorized to provide voice service.

Western Union International (WUI)
One Western Union Plaza
New York, New York 10004
A subsidiary of MCI Corporation. Currently provides international telegraph/record service.

Tropical Radio and Telegraph Corporation (TRT)
26 Broadway
9 Mezzanine
New York, New York 10004
Currently provides international telegraph/record service. Recently authorized to provide voice service.

GTE Telenet, Inc.
8229 Boone Boulevard
Vienna, Virginia 22180
Authorized to provide enhanced communications services internationally.

Tymnent, Inc.
20665 Valley Green Drive
Cupertino, California 95104
A subsidiary of Tymshare, Inc. Authorized to provide enhanced communications services internationally.

Satellite Business Systems (SBS)
8283 Greensboro Drive
McLean, Virginia 22102
A consortium of Comsat, Aetna, and IBM. Authorized to provide enhanced communications services internationally.

EXECUTIVE BRANCH INTERAGENCY COMMITTEES

Senior Interagency Group on International Communication and Information Policy.
(See reference in Ch. on ITU.)

Space Interagency Group
Chairman: William P. Clark, Jr.
Coordinated by NSC.

Members: DOD, NSC, Commerce, ACDA, NASA, and OMB and OSTP as observers.

Purpose. Established by NSC directive to review implications of national space policy.

BIBLIOGRAPHY

Books and Articles

American Bar Association. Annual Report. Public Utility Law. Chicago, Illinois. Updated annually. Review of developments in utility law. Includes a chapter on telecommunications.

American Law Institute. Materials. International Conference on Doing Business in Space: Legal Issues and Practical Problems. International Bar Association, Smithsonian Institution, American Law Institute (American Bar Association). ALI. Philadelphia, Pennsylvania. 1981. 318 pp. Includes articles on regulation of space activities by private industry, internationally organizing for space, cooperation between developed countries and LDCs, intellectual property rights, private sector interests in space, earth stations, liability and risk management, anti-trust, and financing.

Colino, Richard R. The INTELSAT Definitive Arrangements: Osharing in a New Era in Satellite Telecommunication. Monograph No. 9. The European Broadcasting Union, Geneva, 1973. 196 pp. A discussion of the negotiation of and provisions of the INTELSAT definitive agreements, and of the relationship of INTELSAT and other satellite systems.

Committee on Commerce, Science, and Transportation. U.S. Senate. 95th Congress, 2nd Session. Space Law. Committee Print. December 1978. GPO. Compendium of statutes, treaties, and laws.

Government Accounting Office. Report on the 1983 Regional Administrative Radio Conferences (Region 2) on the Broadcasting Satellite Service. 1983. Reviews preparatory work of FCC, NTIA, State, and NASA for June 1983 Conference.

Halket, Thomas D., et. al. Bibliography of the Law of Outer Space. Jurimetrics Journal. Winter, 1982. pp. 195-238. A comprehensive listing of sources of information and analysis of laws relating to the exploration and use of outer space. Prepared by the Space Law and Activities Committee of the Section on Science and Technology of the American Bar Association.

National Telecommunications & Information Administration. U.S. Department of Commerce. Telecommunications Policies in Seventeen Countries: Prospects for Future Competitive Access. G.P.O. Washington, D.C. 1983. 222 pp. Provides profiles of selected countires focusing in the structure and policies that govern the degree of competitive access allowed U.S. companies in provision of telecommunications services and trade in telecommunications equipment.

Smith, Delbert D. Communication Via Satellite: A Vision in Restrospect. Sijthoff and Noordhoff. 1976. 356 pp. Examines the legal and socio-political implications of the development of satellite communication. Traces the development of communications satellites up to the mid 1970's.

Smith, Delbert D. Space Stations. Internationl Law and Policy. Westview Press. Boulder, Colorado. 1979. 269 pp. Assesses international law and policy relating to space stations in terms of specific barriers to utilization, and considers policies designed to overcome perceived barriers.

United Nations Committee on the Peaceful Uses of Outer Space. Report of the Second UN Conference on the Exportation and Peaceful Uses of Outer Space (UNISPACE '82). Vienna, Austria. August 9 to 21, 1982. Recommendations. pp. 1-5. Describes the development of satellite technology, the significant applications of satellite systems and their usefulness to LDCs contemplating the development of national communications systems, remote sensing, planning for the geostationary orbit and the radio frequency spectrum, and the role of international and regional satellite organizations.

United States Federal Communications Commission. FCC Daily Digest and FCC Public Notices. Washington, D.C. Released daily by the FCC Public Affairs Office.

Young, Elizabeth and Jane N. Hurd. Pacific Basin Telecommunications Study. D.C. Public Service Satellite Consortium, 1981. This is a comprehensive study of the subject with significant focus on telecommunications and the management of human and economic resources, and the potential gains from a regional satellite system.

Periodicals

Communications Daily. Albert Warren, Editor & Publisher. Television Digest, Inc., Washington, D.C. 1981 to present. A daily digest of major events in the telecommunications industry, as well as activities of government policy, technical, and regulatory agencies, and pending legislative activity.

International Networks. International Networks, Monson, Massachusetts. Richard J. Solomon, Editor & Publisher. Monthly. Newsletter covers world telecommunications technology and policy.

Satellite Week. Television Digest Inc., Washington, D.C. Albert Warren, Editor. Weekly newsletter reporting on developments in satellite communications and related fields.

Satellite News. Phillips Publishing Company, Bethesda, Maryland. William D. Conner, Editor. Weekly newsletter covering management, marketing, and regulation in the satellite communication field.

CHAPTER IV

TRANSBORDER DATA FLOW

EMERGING ISSUES IN TRANSBORDER DATA FLOW

Robert F. Aldrich

Introduction

The term "transborder data flow" (TBDF) has no fixed meaning. It is used to describe a wide variety of situations in which governments have restricted -- or asserted a right to restrict -- the use of international data communications links. For such restrictions, there are diverse and often mixed motivations, including regulatory, trade, national security, cultural, and privacy concerns. In general, however, TBDF restrictions can be distinguished from more conventional trade and regulatory barriers by their emphasis on the content or use of internationally transmitted information, rather than the transmission facilities or services themselves. In short TBDF problems have to do with what is being electronically transmitted, and why.

The issues falling under the "transborder data flow" classification are both broader and vaguer than traditional telecommunications issues. The very ambiguity of the term expresses a wide-ranging uneasiness, shared by many countries, about the overall impact of new computer and telecommunications technology. As one expert has described it, TBDF has often served as "a kind of shorthand through which nations could express their fears about a changing future and could plot possible ways to 'do something' about it." 1/ More specifically, the growing "permeability" of international borders to information flow is perceived as a threat to national sovereignty over any information-intensive activity or industry.

As yet, however, surprisingly little is known about the content of international data transmissions. Preliminary studies indicate that roughly half of all international data communication involves "intracorporate" data transfers -- i.e., communication between the offices of a multinational corporation. Of the remainder, a substantial percentage has to do with business transactions between an "information-intensive" firm and its customers. Such transactions include airline reservations; loans and investments; currency exchange; credit card transactions; access to "data bases" offering anything from market quotations to weather reports to bibliographic searches; and distributed data processing services. In addition, high-speed communications links are used by the mass media for the gathering and dissemination of news and for the delivery of video programming. As more and more international telecommunications links are established, the growth of international data flow is likely to accelerate.

As stated above, the basic concern of those advocating restrictions is that the growth of TBDF erodes national sovereignty over information-intensive activity. In many countries, for example, it is argued that unrestricted information flow makes it harder to regulate multinational corporations. On one hand, in the view of many, TBDF is

largely a one-way street, strengthening the economic and cultural dominance of large industrialized countries such as the United States, while maintaining the dependent status of smaller and poorer countries. The United States, on the other hand, takes the position that "free flow of information" 2/ across borders generates far more benefit than harm, and that it should not be restricted for other than compelling reasons.

In addition to these substantive conflicts, there are significant differences in intellectual approaches to TBDF. A growing body of literature calls for the development of a holistic perspective on the subject -- summed up in the French-coined word telematique. 3/ In the United States, however, there remains considerable doubt that any single theory can adequately address such a diverse set of issues. 4/

TBDF issues are raised and discussed in many international forums. Generally speaking, the issues have developed along two tracks. Problems involving intracorporate and commercial data communications are debated by the developed countries in the Organization for Economic Cooperation and Development (OECD), and by the world at large in the United Nations Commission on Transnational Corporations (UNCTC). Mass-media issues, such as press freedom and direct satellite broadcasting, have been addressed primarily in the United Nations Educational, Scientific, and Cultural Organization (UNESCO). 5/ For the present, at least, most TBDF issues are too ill-defined to result in binding international rules. International discussions of the subject serve primarily as sources of moral support for the adoption or relaxation of information flow restrictions by individual countries.

Given the variety of problems covered by the TBDF label, no standard classification has yet been developed. In this chapter, restrictions on commercial data communications are covered in the first three sections, and are classified as (1) economic restrictions, (2) vulnerability issues, and (3) privacy. Regulation of mass media is discussed in the final section.

Economic Restrictions

New telecommunications technology has introduced an extraordinary element of flexibility into data-processing and other information-intensive activities. Today, it is technologically possible and often economically feasible to conduct data-processing, data-base access, financial transactions, and other business functions at locations remote from the ultimate customer or user. However, the efforts of commercial firms and multinational corporations to make use of this new flexibility are inhibited by a variety of economically motivated restrictions.

In some cases, such restrictions result indirectly from telecommunications regulations that seem increasingly outmoded today. For example, many foreign telecommunications administrations (or PTTs) severely limit the use of dedicated communications links, or private

lines. As in the United States at an earlier time, the PTTS of other countries tend to disapprove non-traditional uses of private lines, on the grounds that they divert revenues from the public network and undermine the PTT's role as the monopoly service provider. Although such restrictions do not directly affect the content of transmitted data, they can substantially inhibit the freedom of multinational corporations and international computer service firms to choose the most efficient location for data processing and other information functions. Private-line limitations may also have the effect (not necessarily intended) of protecting domestic data processing firms from foreign competition. 6/

Restrictions on information flow may also be imposed as an explicit tool of trade policy. Brazil, for example, aggressively promotes the development of a domestic data-processing and information retrieval industry. In addition, Brazil is attempting to reduce the dependence of any domestic industry on foreign managerial and technical skill, and generally to enhance the autonomy of Brazilian subsidiaries of foreign corporations. Accordingly, the government carefully regulates transborder data flows to "maximize the amount of information resources -- such as computers, software, data bases, technical and managerial skills -- located in its territory." 7/

Each application for a dedicated international data communications link is scrutinized by a Special Secretariat for Informatics to determine whether approval is consistent with Brazil's TBDF policy. If the Secretariat finds that the communications link would facilitate foreign data-processing, data-structuring, or managerial activity that could be accomplished in Brazil, it withholds approval until a more acceptable arrangement can be negotiated. Brazil's policy covers intra-corporate transfers as well as commercial data flows between a foreign firm and its customers.

Essentially, Brazil takes the position that shipments of data have the same trade implications as shipments of physical goods, and that control of data flows is a legitimate instrument for the promotion of "infant" high-technology industries. 8/ In theory, the trade analogy can be taken even further: some experts have argued that international data shipments should be subject to customs inspection, valuation, and tariffing at the border. Although perhaps logical in the abstract, any such development would be extremely troubling on a number of grounds.

First, the burdensome administrative procedures that would be required could largely negate the gains in efficiency made possible by new telecommunications and computer technology. Second, to monitor the content of data flows would seriously erode the high standards of privacy that have traditionally been observed in telecommunications. Finally, the inspection and censorship of transborder data flows, for whatever purpose, establishes a disturbing precedent for freedom of expression.

Even when they stop short of such extremes, regulatory and trade-related restrictions on the content and use of transmitted data have depressing implications for advocates of free trade and pro-competitive policies. At a time when the developed countries are still struggling to reduce barriers to trade in goods, it is disheartening to find that new barriers are being erected in the information sector.

Once such restrictions are in place, it may be unusually difficult to negotiate their removal, because there is currently no international consensus on either telecommunications regulation, or trade in intangibles such as information. The United States, therefore, has emphasized the need for further study of TBDF and its consequences, in forums such as the OECD and UNCTC, before restrictive rules are established. Where data flows are already being restricted, the United States has sought to open bilateral negotiations with the countries involved, while promoting the long-term integration of data-flow and other "trade-in-services" issues into the international trade framework of the GATT.

Vulnerability Issues

Many TBDF problems have little obvious connection with either telecommunications or trade; instead, they arise from the perception that certain kinds of information are vital to a country's national interests, and that such interests may be endangered when the data is transmitted to another country for processing, storage, or use.

One area of perceived vulnerability is the banking industry. In Canada and West Germany, for example, banking regulations have been tightened, apparently to assure that all records are accessible to banking inspectors. As a result, bank records may not be transmitted to other countries for processing without the approval of authorities.

In other instances, the basis for concern is national security. This subject is particularly sensitive in the United States, where it is becoming increasingly difficult to police the transfer of militarily critical technology to potentially hostile countries without simultaneously inhibiting commercially important information exchanges.

The concept of vulnerability has been mostly deeply explored by Sweden. Given the complexity of a computerized society, Sweden has made a general determination that extra precautions are needed to keep vital information processing functions from being shut down either deliberately or by accident. In a 1978 report, Sweden's "Vulnerability Board" (SARK) concluded that "vulnerability is unacceptably high," and that the risks extend not only to military and other government data bases, but also to banks and to at least some industrial operations. 9/ While recommending various steps for the protection of domestic data processing activity, SARK also proposed that some data processing functions should not be carried out on foreign soil, because of the danger that international communications will be interrupted, and the inability of Sweden itself to control or protect such operations. In 1981,

a Vulnerability Board (SARB) was appointed to evaluate and propose specific measures.

Yet another vulnerability concern arises from the development of information-gathering technology such as "remote sensing" of geographic data by satellite. Some countries have asserted a quasi-proprietary right to protect data pertaining to them from such exploitation, on the grounds that it is a national resource subject to government control. 10/

Restrictions on Personal Data

The protection of personal data deserves to be treated at greater length than other TBDF issues, because it was the first to arouse widespread international debate. The "life cycle" of this issue may well offer guidance in responding to other, more recent problems.

Although the concept of privacy has a long history, the concerns discussed here were first raised in the 1960s, as computers became the most efficient and thus the preferred means of storing and processing large quantities of personal information. Ironically, while the United States was one of the first countries to recognize and address this issue, we are perceived today as lagging behind, and by some as offering inadequate protection for computerized personal data.

There is little international disagreement as to the nature of the privacy problem. Given the quantity of personal data kept in computers and other institutional records systems, most of the OECD countries agree that greater vigilance is needed. However, not all countries agree on the best way to prevent personal data from being abused. Eight European countries have developed comprehensive schemes of registering and regulating computerized personal data systems. Other countries have developed little if any law on the subject. Still others, including the United States, have taken a selective approach to privacy legislation, heavily regulating some kinds of personal records while letting others be protected mainly on a voluntary basis. In light of these divergent approaches, there has been increasing interest in the harmonization of privacy protection laws or principles.

The main impetus for harmonization has come from those countries with comprehensive privacy or "data protection" statutes. In such countries, any computerized personal data system not specifically exempted must be registered or licensed by the government. The records must be managed according to specific regulations or generic principles, and are overseen by a "data commissioner" with substantial powers of inspection and enforcement. In countries where this degree of regulation is believed necessary, the legislation conceivably could be frustrated if data about citizens leaves the country. Will it be managed with the same care as is required by the domestic statute, or will it be used or disclosed inappropriately, with possibly adverse effects on the individual concerned? In order to limit these perceived dangers, many data protection laws authorize restrictions on information flow to countries where privacy is not adequately protected.

However, there is also a danger that unnecessary restrictions will significantly disrupt international commerce. Accordingly, in the late 1970's the industrialized countries attempted to reach a consensus on general principles of privacy protection and on methods for their implementation. The first set of negotiations was held by the OECD which, in 1980, produced the OECD "Guidelines on the Protection of Personal Privacy and Transborder Flows of Personal Information." U.S. negotiators played a major role in drafting the Guidelines, and signed the resulting document.

Although the Guidelines are "recommendations" with no formal legal significance, they incorporate a set of general principles that have achieved wide acceptance in many countries. In brief, the Guidelines recommend that there should be limits to the collection of personal data; that personal data should be relevant to the purposes for which it is used; that such purposes should be specified in advance; that information should not be disclosed or used for unauthorized purposes; that there should be safeguards against unauthorized disclosure; and that individuals should be able to learn the existence of records about them and to inspect and challenge the contents. The Guidelines contemplate that signatory countries will take steps to implement these principles, either through legislation or a combination of legislation and private initiative; however, they explicitly discourage any unnecessary interference with international flows of personal information. 11/

In the United States, implementation of the Guidelines has not produced any major changes in the existing body of privacy law, which was already expanded considerably during the surge of privacy concern in the 1970's. Our privacy law still does not provide comprehensive regulation of all personal data systems; however, Congress has been reluctant to impose an entirely new layer of regulation on top of the rules already in force. 12/ Instead, the U.S. government in 1980 began an initiative to promote voluntary endorsement and implementation of the Guidelines, particularly by multinational corporations. By March 1983, 181 corporations and trade associations had stated their support for the Guidelines principles.

Also in 1980, however, a second set of privacy negotiations was held by the Council of Europe (COE), and resulted in a formal treaty, the "Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data." Unlike the Guidelines, the Council of Europe Convention must be implemented through comprehensive privacy legislation; therefore, the United States cannot join it without a major reform of our privacy laws. The COE Convention also allows for the application of data protection laws to "legal persons" -- corporations, labor unions, and other associations. Such extensions of coverage, the rationale for which is not easy to comprehend, could add substantially to the burdens imposed on commercial communications and data processing.

Only one country, Sweden, has ratified the Convention to date, but others are expected to follow. Today, it is believed by some that the U.S. effort to maintain a non-restrictive climate for personal

information flows under the OECD Guidelines could be compromised as a result of the more restrictive COE Convention.

It is difficult to predict what direction the international privacy issue will take. Under one scenario, the COE Convention may encourage strict enforcement of existing statutory provisions authorizing the restriction of international personal data flows, which may in turn cause substantial interference with international commerce. On the other hand, the Convention may serve primarily to coordinate the administration of data protection laws within Europe, with little or no effect on non-parties such as the United States.

Mass Media Restrictions

In the mass media area, as with other aspects of TBDF, economic disputes tend to be interwoven with other concerns. Many developing countries wish to foster domestic news-gathering and television programming industries, and to end their economic dependence on the West in this sector. At the same time, many believe that Western news media tend to paint a distorted picture of non-Western societies, and that unrestricted dissemination of Western television programming and advertising in their countries generates unfulfillable expectations while eroding the indigenous culture. The main forum for debate on such issues has been UNESCO. 13/

The UNESCO debates have continued for many years, and have involved primarily the wording of various draft declarations. The main concern of the United States and other developed countries is that proposals to correct "imbalances" in information flow often contain explicit or implicit endorsements of restrictions on journalistic activity. Such restrictive proposals have been encouraged and sometimes initiated by the Soviet Union.

In 1978, UNESCO's 20th General Conference attempted to accommodate both developed and developing countries' concerns with a Declaration endorsing both "free flow" and "a wider and better balanced dissemination of information." Although relatively unobjectionable, the terms of the Declaration were so general that they could not be expected to resolve the underlying debate. Two years later, further controversy was generated by the "MacBride Report," issued by UNESCO's International Commission for the Study of Communications Problems. While approving the principles of free press and access to news, the MacBride Report also recommended a wide variety of economic measures to correct the North-South imbalance -- measures which many perceived as inconsistent with a free press. This report was praised but not adopted by UNESCO's 21st General Conference in 1980.

At the same Conference, however, UNESCO adopted a U.S. proposal to create an International Program for Development of Communications (IPDC), as a mechanism for channeling communications aid to the developing countries. The United States reasoned that practical cooperation and assistance between developed and developing countries would be more fruitful than continued rhetorical debate.

It is not yet clear how the IPDC will evolve. The United States remains concerned that there will be continued efforts to impose some kind of corrective international code on the mass media. Accordingly, in 1982 Congress adopted the "Beard Amendment," requiring that U.S. funds for UNESCO be withheld if it "implements any policy or procedure the effect of which is to license journalists or their publications, to censor or otherwise restrict the free flow of information within or among countries, or to impose mandatory codes of journalistic practice or ethics." 14/

In addition to the general issue of media imbalance, UNESCO has focused on the specific issues raised by direct broadcasting satellite (DBS) services. The rationales offered for and against restriction are similar to those described at the beginning of this section. Since 1972, DBS has been studied by UNESCO's Committee on the Peaceful Uses of Outer Space. Proposals were made, against U.S. opposition, to restrict the content of DBS programming, and to prohibit any broadcasting without the consent of the government of the receiving country. In 1982, the UN General Assembly adopted a resolution which, while not restricting content, does recommend that DBS services should not be established without agreements with the receiving countries. Although this resolution is not a binding legal instrument, efforts will probably be made to clarify the ITU's radio regulations in conformity with the UN language.

Conclusion

In view of their great diversity, it is difficult to generalize about the future of TBDF restrictions. The technological advances underlying all TBDF issues will undoubtedly continue. As a result, the economic, social, and cultural concerns associated with TBDF may intensify even further. However, as electronic information flows become a more familiar aspect of international life, some of the perceived problems may recede. In addition, there is no escaping the fact that information flows are inherently difficult to either detect or classify for purposes of regulation. Eventually, it may become clear that the advantages of free flow and the difficulty of regulation outweigh most of the apparent benefits of a restrictive regime.

FOOTNOTES

1. O.H. Ganley and G.D. Ganley, International Implications of United States Communications and Information Resources. (Harvard University Program on Information Resources Policy, 1981). p. 91.

2. The "free flow of information" principle is derived from Article XIX of the United Nations' Universal Declaration of Human Rights:

> "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."

G.A. Res. 217(III), U.N. Doc. A/810, at 71, art. 19 (1948). However, U.S. advocacy of "free flow" is also based on free-trade principles, which have obvious application to the commercial aspects of information flow.

3. The French have been leading advocates of a unified perspective on TBDF, and indeed on all computer/communications issues. See, e.g., S. Nora and A. Minc, L'Informatisation de la Societe (1978); L. Joinet, Les Aspects Juridiques, Economiques et Sociaux des Flux Transfrontieres de Donees Personnelles, 1 Information, Computer and Communications Policy 208 (1979); A. Madec, Economic and Legal Aspects of Transboder Data Flows, in OECD Doc. DSTI/ICCP/80.26 (1980).

The developing countries have also attempted a unified presentation of their concerns, under the label "New World Information Order." See Hamelink, Informatics: Third World Call for New Order, 29 J. Comm. 144 (1979); Masmoudi, The New World Information Order, 29 J. Comm. 172 (1979); Bortnick, International Information Flow: The Developing World Perspective, 14 Cornell Int'l L. J. 333 (1981).

4. U.S. policy on TBDF, however, does make reference to general principles such as free expression, free trade, and the "free flow of information." One of the challenges of U.S. policy is to define and apply these principles fruitfully while taking account of the diversity of information and its uses.

5. Yet another forum for TBDF issues is the Intergovernmental Bureau for Informatics (IBI), originally sponsored by UNESCO. However, the United States does not participate in this organization.

6. For a discussion of recently adopted regulations in West Germany and Japan, see Markoski, Telecommunications Regulations as Barriers to the Transborder Flow of Information, 14 Cornell Int'l L. J. 287, 311-19 (1981).

7. Transborder Data Flows and Brazil (prepared by Brazil's Special Secretariat for Informatics, for the United Nations Centre on Transnational Corporations, 1982), para. 7.

8. Id. at para. 475.

9. Committee on the Vulnerability of Computer Systems, Swedish Ministry of Defense, The Vulnerability of the Computerized Society (1978, abridged Eng. tran. 1980).

10. The remote sensing issue has been discussed at length by the UN Committee on the Peaceful Uses of Outer Space.

11. Organization for Economic Cooperation and Development, Guidelines on the Protection of Privacy and Transborder Flows of Personal Data, paras. 7-19 (1980).

12. For a description of existing U.S. privacy law, see R.F. Aldrich, Privacy Protection Law in the United States (U.S. Dept. of Commerce/NTIA, 1982).

13. For developing countries' concerns about mass media, see the sources cited at note 3, supra. Canada, despite its "developed country" status, also considers itself a victim of economic and cultural domination by its larger neighbor. See, e.g., Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty, Telecommunications and Canada (1979).

14. Department of State Authorization Act, Pub. L. No. 97-241, § 109, 96 Stat. 276 (1982).

UNITED STATES LAWS AND REGULATIONS

United States Constitution. U.S. Const. amend. I.

Prohibits Congress from making laws prohibiting freedom of speech, press, or peaceful assembly.

Fourth Amendment. U.S. Const. amend. IV.

Prohibits the government from violating the right of people to be secure in their persons, houses, papers, and effects against unreasonable search and seizure.

Fifth Amendment. U.S. Const. amend. V.

Prohibits the government from forcing an individual to testify against himself in a criminal proceeding.

14th Amendment. U.S. Const. amend. XIV.

Requires equal protection of the law for all persons, and extends the first ten amendments to state law.

Privacy Act of 1974, 5 U.S.C. §552a (1976), Pub. L. No. 93-579, 88 Stat. 1897.

Purpose. Establishes data protection for most categories of Federal records maintained on individuals. Primary objective is to achieve an appropriate balance between the Federal government's need for information about its citizens and an individual's right to privacy. Seeks to achieve this objective through procedures to regulate the collection, maintenance, use, and dissemination of information by federal agencies. (5 U.S.C. §552a)

Oversight. Establishes a system of checks and balances to assure the effective operation of these procedures, including provisions for individual rights, public scrutiny of agency recordkeeping practices, OMB and Congressional oversight of agency activities, and both civil and criminal sanctions. (5 U.S.C. §552a)

Record subject rights. Provides individual record subjects with basic rights including: right to know authority under which information about them is collected, the purpose for which it is collected, and the effect of not providing information; right of access to agency records about them, and to agency records on the disclosure of this information; and right to request amendment, correction, or expungement of records about them; right of appeal from an adverse decision about them based on recorded information; and right to sue the agency in U.S. District Court to gain access to or amendment of records, or to obtain damages for violations of the Act which result in injury to them. (5 U.S.C. §522a)

Accountability. Does not establish central administrative or enforcement body in the Federal government, but does make heads of executive agencies responsible for compliance with the Act, and assigns OMB responsibility for providing guidelines and regulations for use by agencies, providing assistance to agencies and overseeing effective operation of the procedural mechanism established by the Act. (5 U.S.C. §552a(g),(i))

Freedom of Information Act, 5 U.S.C. §552, Pub. L. No. 89-554, 80 Stat. 383q (1966).

Provides access to many types of records that are exempt from individual access under the Privacy Act including many categories of personal information. Unlike those of the Privacy Act, FOIA procedures are available to non-resident foreign nationals. (5 U.S.C. §552)

Right to Financial Privacy Act of 1978, 12 U.S.C. §3401, et. seq., Pub. L. No. 95-630, 92 Stat. 3697 (1978).

Requests of Federal government for access to records. Generally requires federal agencies that request access to private financial records either (1) to provide notice of the purpose for which the records are sought and an opportunity for the record subject to challenge disclosure in court, or (2) to obtain a court order for direct access to the records on the basis that notice would allow the record subject to flee or destroy evidence. (12 U.S.C. §3401, et. seq.)

Notice to record subject. Ordinarily prohibits any federal agency from disclosing an individual's financial records to another agency without notifying the individual and obtaining certification from the receiving agency that the records are relevant to a legitimate law enforcement inquiry of the receiving agency. (12 U.S.C. §3401, et. seq.)

Formal requests for records. Authorizes customers to challenge a subpoena or formal written request by a government agency to a financial institution for records relating to the customer by filing a motion in federal district court to quash the subpoena or otherwise prevent disclosure. Where a government agency obtains, or a financial institution discloses, records or information in violation of the Act, the Act holds the agency or institution liable to the customer for any actual damages sustained, imposes $100 penalty, or imposes such punitive damages as the court may allow for willful or intentional violation, and court costs and attorney's fees. (12 U.S.C. §3401, et. seq.)

Federal Fair Credit Reporting Act, 15 U.S.C. §1681, et. seq., Pub. L. No. 90-321, as added by Pub. L. No. 91-508 (1970), 84 Stat. 1128.

Disclosure of records to federal agencies. Authorizes consumer reports maintained by consumer reporting agencies to be disclosed to government agencies only in response to a court order or to an agency that requires a consumer report for legitimate business purposes. (15 U.S.C. §1681, et. seq.)

Notice of investigations. Requires that when a data broker is hired to prepare an "investigative consumer report" (on personal characteristics, or "mode of living" by means of interviews with friends, neighbors, and associates), the requirements for information must be disclosed to the subject of the report requested. Requires brokers to maintain "reasonable" security procedures, including procedures to verify the identity of report recipients and the stated purposes for receiving a report. (15 U.S.C. §1681, et. seq.)

Adverse actions. Requires that if a consumer report is used in any decision to deny credit, insurance, or employment, the report user must tell the consumer the name and address of the reporting agency. Provides for access and correction procedures. Regulates the quality of data used by reporting agencies, requiring "reasonable procedures" to avoid reporting specified categories of obsolete information and to verify information in investigative consumer reports that are used more than once. (15 U.S.C. §1681, et. seq.)

Enforcement. Permits civil suits by individuals for violations of the Act by credit-reporting agencies or parties who obtain consumer reports, and recovery of actual damages suffered, as well as attorney's fees and court costs. Authorizes award of punitive damages and imposition of criminal penalties for willful violation of the Act. Requires that administrative enforcement be provided by the Federal Trade Commission or the particular Federal agency charged with responsibility for the various financial institutions subject to the Act. Generally, empowers agencies to

declare action to be in violation of the applicable statute, issue cease and desist orders, and impose statutory penalties for noncompliance with agency orders. (15 U.S.C. §1681n-1681s)

The Family Educational Rights and Privacy Act of 1974, 20 U.S.C. §1232g, Pub. L. No. 90-247, as amended by Pub. L. No. 96-46 (1979). 93 Stat. 342.

Access of Federal government to records. Prohibits government access to personal data in education records without a court order or lawfully issued subpoena, except for specified education-related purposes. (20 U.S.C. §1232g)

Subject rights: enforcement. Grants students and their parents the right to inspect and challenge education records. Additionally administrative enforcement of the Act is vested in the U.S. Department of Education, and the Act provides for termination of federal funds if an institution violates the Act and compliance cannot be secured voluntarily. (20 U.S.C. §1232g(f))

Electronic Funds Transfer Act of 1978, 15 U.S.C. §1693, Pub. L. No. 90-321, as amended by Pub. L. No. 95-630 (1978), 92 Stat. 3728.

Notice to record subjects. Requires banks that provide electronic funds transfer (EFT) services to notify applicants for such services about the kinds of disclosures routinely made of account information. The bank must make extensive disclosures to customers about specific EFT transactions, both at the time they are made and in the form of periodic statements. In addition, customers must be notified at the time they contract for EFT services of their rights, liabilities, charges, procedures, etc., connected with the services, and of whom to contact if an unauthorized transfer is suspected. In the case of preauthorized periodic transfer -- such as automatic bill paying -- the bank must provide either positive or negative notice as to whether payments are being made on schedule. The Act also sets up detailed procedures for the resolution of any inaccuracies in customer accounts, and imposes liability on the bank for errors in the transmission or documentation of transfers.
(15 U.S.C. §1693)

Enforcement. Permits an individual who prevails in a civil action for violation of the Act to recover actual damages sustained, a penalty of $100 to $1000, and attorney's fees and court costs. In limited situations a successful plaintiff may recover treble damages. Criminal penalties are also set out for deliberate violations of the

Act. Finally, administrative enforcement responsibility is vested in the appropriate federal agency. (15 U.S.C. §§1693m-1693o)

Preemption. Annuls state laws that are inconsistent with the EFT Act, but state law provisions continue to apply to the extent that they are not inconsistent with or are more protective than federal law. (15 U.S.C. §1693q)

Tax Reform Act of 1976, 26 U.S.C. §7609, Pub. L. No. 94-455 (1976), 26 U.S.C. §1, et. seq.

Access of Internal Revenue Service (IRS) to records. Authorizes the IRS to obtain access to certain institutional records about an individual in the hands of certain private record keepers only by following notice and challenge procedures similar to those of the Right to Financial Privacy Act of 1976. (26 U.S.C. §7609)

Disclosure. Limits disclosure of tax returns and return information, and, in some cases, a court order is required for disclosures to law enforcement agencies for purposes unrelated to tax administration. (26 U.S.C. §6103)

National Association of Insurance Commissioners (NAIC) Model Law, (Approved by the NAIC in December 1979 and enacted in ten states. See e.g. California Insurance Code 791; Illinois Annotated Statutes Ch. 73, 1001-1924.))

Notice to record subjects. Requires insurance companies and insurance agents to notify applicants about the collection and disclosure of personal data, and to specify when information is requested solely for marketing or research purposes. In addition, restricts the use of "pretext interviews" (in which the identity or purpose of the interviewer is misrepresented) and requires specific consent forms to be used for the collection of information that requires authorization from an individual. Requires specific notice to be given if information is collected via personal interviews with neighbors, acquaintances, or associates of an individual. Grants applicants or policyholders access and correction rights to non-privileged information about them. Imposes data quality standards on underwriting decisions by prohibiting denials of coverage based solely on previous denials of coverage.

Enforcement. Authorizes State Insurance Commissioner to issue cease and desist orders to prevent violations of the Act, as well as to order payment of monetary penalties, suspend, or revoke an insurance company's or agent's license for willful violations of the

Act. Negligent violation of the Act's disclosure provisions will subject an insurance company or agent to liability for any actual damages plus punitive damages up to three times the amount of actual damages. A successful plaintiff also may recover court costs and attorney's fees. Any person who knowingly and willfully obtains information about an individual under false pretenses is subject to fine and/or imprisonment.

Authorization for Fiscal Year 1982 and 1983 Appropriations, Department of State, United States Information Agency, the Board for International Broadcasting, and the Inter-American Foundation. Pub. L. No. 97-241 (1982). (Beard Amendment)

Presidential report on UNESCO. Strengthens the management and organization of the Board for International Broadcasting and the USIA. Requires the President to evaluate and, not later than six months after enactment of the Act, report to Congress his assessment of the extent to which U.S. financial contributions to UNESCO and UNESCO programs serve the national interests of the United States, particularly regarding the communications activities of UNESCO. Requires the President to recommend improvements in the quality and substance of U.S. representation in UNESCO. (Pub. L. No. 97-241, §108)

U.S. contribution to UNESCO. Prohibits U.S. contribution to UNESCO if UNESCO implements policies or procedures whose effect is to license journalists or publications to restrict the free flow of information internationally or to impose codes of ethics on journalists. Requires Secretary of State to report annually on UNESCO activities as described.
(Pub. L. No. 97-241, §§ 109(a)

FOREIGN LAWS AND POLICIES

Data Protection Laws

Austria

Datenschutzgesetz (DSG) (Bundesgestzblatt fur die Republik Osterreich (BGB), Jahrgang 1978 am 28 November 1978, 193, stuck.

Creates a right to data protection for individuals, associations, and corporations with respect to data maintained by both the public and private sectors. (565. Bundesgesetz)

Establishes a Data Protection Commission to administer the Act and a Data Protection Council to be a "political observer." Commission enforces Act in the public sector, acts as an administrative court, investigates data processing transactions, and approves transborder data flow for both the public and the private sector records. (565. Bundesgesetz vom 18. Oktober 1978, uber den Schutz personenbezogener Daten)

Applies to data on Austrians whether living in Austria or abroad, and whether data is held by the public or private sector. (193. Stuck - ausgefertigt am 28 November 1978 No. 565, p. 3619.)

Belgium

Proposed legislation in Parliament.

Canada

Canadian Human Rights Act (1977) (Part IV), Canada Gazette, 1976-77, Can. Stat., CL 33, as amended by 1977-78 Can Stat., CL 22, 35.

Enumerates "private information rights" of individuals with respect to Federal Government records, including: a right to know what records the Government maintains, the right to know how this information is being used, and the right to challenge the correctness, relevance, and currency of the information.

Establishes a Human Rights Commission with the Privacy Commissioner as a member. The Privacy Secretariat, under the Commissioner, receives and investigates complaints from individuals alleging infringement of rights under Part IV. The Commissioner may recommend action to the Minister of Justice.

Denmark

Public Authorities and Private (Enterprises) Acts, Lortidende for Kongeriget Denmark (Lortid. Dan.) (1978).

Public Sector Act concerns electronic data systems only, and only addresses personal information.

Private Sector Act concerns data in manual and electronic record systems and both personal data and financial data about corporations.

Creates a Data Surveillance Authority (DSA) to ensure compliance with the objectives of the Act which can receive complaints from data subjects or initiate its own investigations of record systems.

With respect to private sector records, gives the DSA authority for surveillance of newly proposed and established registers and to collect information about registers. The DSA also issues licenses for transnational data processing.

Holds companies responsible for establishing codes to ensure that standards of Danish law are followed in other countries, and prohibits collection and maintenance of information on Danish citizens that may not be collected or maintained under Danish law in files of other countries. Generally, information defined by law as sensitive may not be exported without a prior license from the DSA.

Federal Republic of Germany

Act on the Misuse of Personal Data in Data Processing, Bundesdatenschutzgesetz (BDSG). Enacted Janaury 27, 1977. Entered into force January 1, 1978. Fully implemented by January 1979. Bundesgesetzblatt (BGBl) Nr. 7 - Tag der Ausgabe: Bonn, den 1. February 1977. p. 207.

Scope. Protects personal data in public files, and files of physical or legal persons maintained for their own purposes or for transacting business with others. Covers manual and automated files with slightly different provisions. (§1)

Rights. Entitles data subject to information about him in a file; to correction of inaccurate data and blocking or erasure of data stored which is obsolete or not useful for the purpose collected; and to consent to disclosure of data. (§§4,5)

Administration: public sector records. Establishes a Federal Commissioner for Data Protection to ensure that any data protection legislation is observed by public authorities. Requires Commissioner to keep an open register of automatic data files containing personal data. Authorizes Commissioner to submit a complaint to appropriate bodies if he discovers infringements of the Act. Authorizes Commissioner to receive complaints from data subjects who believe that their rights have been violated. (§§19, 20, 21)

Administration: private sector records. Delegates the supervision of the Act with respect to private sector record systems to authorities appointed in each state, and requires each organization maintaining personal record systems to appoint a person to be responsible for compliance with the Act. (§§28, 29, 30, 38, 40)

Transborder data flow. Implicit recognition of authority to limit transborder data flow of automated personal records.

Finland

Legislative proposals in Parliament.

France

Data Processing, Data Files, and Individual Liberties, Act 78-17, (January 6, 1978), Journal Officiel de la Republique Francaise (80).

Regulates "nominative automated data processing;" the collection, registration, addition to, storage, and distruction of personal data in both the public and private sectors. Covers the use of automated data bases and files, and also the interconnection, referral, and communication of personal data. Certain provisions apply additionally to non-automated personal information.

Creates the Commission Nationale de l'Informatique et des Liberte's (CNIL) with broad supervisory and enforcement powers, including: collection of information monitoring personal record systems; establishment of "preventive guarantees" which have to be carried out prior to the starting up of data processing systems; recognition of a right to access and rectification; regulation of the collection, recording, and maintenance of name-linked data; and gradual introduction of the law so as to facilitate the CNIL's monitoring duties. CNIL has the power to ensure compliance by making spot checks of data facilities, and by refusing to authorize data processing or transfer which it feels would violate the law.

Excludes legal persons from the scope of the Act.

Gives CNIL power to regulate or prohibit transborder data flow of name-linked data.

Israel

Protection of Privacy Law (5741-1981), Sefer Ha-Chukim No. 1011, 5 Adar Bet., 5741, 11 March 1981, p. 128.

Requires the Minister of Justice to make regulations to implement the law, including establishing conditions of keeping and safeguarding information in electronic data bases, rules of conduct and ethics for persons in possession of employee data bases, and conditions of transmitting or restricting transmission of data base information outside of the state.

Establishes a Registrar to keep a Register of Data Bases for all electronic data bases containing personal information, to inspect electronic data bases, and to apply to court to cancel registration where the possessor of a data base has violated the law. Data protected by the law includes data on personality, personal status, intimate affairs, state of health, economic position, vocational qualifications, opinions, and beliefs.

Luxembourg

Law Regulating the Use of Personal Data in Data Processing (March, 1979), Memorial, Journal officiel du Grand-Duche' de Luxembourg; Memorial, Amtsblatt des Crossherzogtums Luxemberg.

Applies only to automatic data files, but "protects" the privacy of both natural persons and legal entities. Requires compulsory prior

authorization for automatic data processing, whenever name-linked data is involved.

Appoints a government Minister to administer and enforce the law, and establishes a separate "commission" to advise the Minister and inform the public about data laws and informatics.

Provisions include: obligation to obtain authorization for all data bases containing personal data; creation of a national directory of data bases; rights of data subject regarding access to the data base and correction of incorrect data; regulation of data collection; surveillance of data bases; and rights and duties of data processing specialists.

Requires that terminals used in Luxembourg, but linked to foreign databanks, be authorized in the same manner as local data systems. Requires terminal users to declare the "purpose" of their processing activities. Requires the minister to be informed of transborder data flows and, under the law, to refuse authorization if he "reasonably fears abusive use of personal data."

Netherlands

Proposal currently in Parliament.

New Zealand

Human Rights Commission Act (1977), NZ Stat. 1977, No. 49, as amended, 1977, No. 93, S. 16(4), 1977, No. 108, S. 6(2), 1977, No. 110, S. 33(1).

Incorporates the United Nations International Covenants on Human Rights. Gives the Commission several privacy functions. However, these privacy functions are not defined or delineated with respect to "data protection" as such, except for a reference to the privacy of records in the Wanganui Law Enforcement Computer Center, which maintains a computer based information system to aid the Departments of Police and Justice and the Ministry of Transport in carrying out their duties.

Norway

Personal Registers Act (1978), effective January 1, 1980, Norsk Lovtidend (Nor. Lovtid.), Statute No. 48 of June 9, 1978. p. 402.

Covers the systematic collection of personal information by the public and private sectors. Establishes general rules for collection, use, and dissemination of personal and corporate information together with a licensing system for certain registers.

Establishes an administrative body, the Data Inspectorate, with jurisdiction over all computerized files and manual records, which include sensitive information as defined by the Act.

Protects legal persons as well as natural persons, although distinctions between legal and physical persons under the Act are to be set forth to avoid unintended application of the law by competitive enterprises. The right of access of legal persons is unclear.

Requires no special license for transborder data flows but the Data Inspectorate must be advised "in good time on a special form before the transfer takes place." In the Order of Council, the DI has the power to refuse or impose conditions on requests for international data transfer.

Portugal

Constitution of the Portugese Republic, Art. 35, §1-3.

Legislation guarantees right of privacy proposal currently in Parliament.

Spain

Constitution of the Spanish State, Art. 18.

The right of honor, personal and family privacy, and identity is guaranteed. (§1)

The secrecy of communications, particularly postal, telegraphic, and telephone communications, is guaranteed, except by judicial order. (§3)

Legislative proposal currently in Parliament.

Sweden

Data Act (1973:289), amended July 1, 1979, and March 1980, Svensk Forfattningssamling (SFS).

Applies to personal information maintained in both the public and private sectors. Limits the formation and use of "personal registry" systems to data that 1) contain personal information that identifies the individuals concerned; and 2) are made by automated data processing.

Establishes an administrative agency, a Data Inspection Board (DIB), to administer and enforce the Act.

Provides that all data processing must be authorized and licensed by the DIB, that personal information cannot be sent abroad without special prior licensing, and that citizens have right of access to files concerning them. The March 1980 amendments include measures to tighten up on tax evasion and to restrict information on government activity available to individuals.

Requires DIB approval before personal data may be transferred abroad, whether maintained in an electronic or manual record system, if there is intent to process the information electronically in the receiving country. Approval can be denied if there are grounds to believe that Swedish data located in another country will result in or cause "undue encroachment on privacy."

Other Laws and Policies Affecting TBDF

Brazil

Normative Act 22/82. For Registration of All Computer Software. Effective December 7, 1982.

Creates three categories of computer programs:

A) Programs developed in Brazil by Brazilian persons or corporations physically resident and domiciled in Brazil;

B) Programs developed outside of Brazil with no national alternatives, and of relevant economic interest to the country, whose program technology and economic exploitation rights have been effectively transferred to a national company specializing in and capable of developing new programs and services;

C) All programs not in categories A and B. Requires government agencies, state enterprises and foundations supported by the government to use Category A programs whenever possible. Bars companies using unregistered programs from selling services to the government and from taking advantage of having the income tax lowered to offset the cost of buying software.

Registration is for two years. Category B and C programs will be registered only if national alternatives are not available. Authorizes Special Secretariat for Informatics (SEI) to cancel registration if it is provided with false information or if users impede inspections by its agents.

Makes registration with SEI a prerequisite for certain actions: a) contracting by government bodies for the use of a program; b) approval by SEI of contracts involving programs registered with the National Institute of Industrial Property (INPI); c) SEI review of plans to import data processing machinery and their operational programs; and d) SEI analysis of Brazilian manufacturers of informatic equipment in regard to the programs necessary to operate the equipment.

Canada

Banks and Banking Law Revision, 1980 (Bank Act).

Requires all processing of bank data which might be required by banking authorities to be carried out in Canada. Data may be transmitted out of Canada, but the Inspector General of Banks must be notified. (§157)

Prohibits banks from selling time-sharing services on their computers which are unrelated to their own or their clients' banking activities. This applies to all banks operating in Canada, whether Canadian or foreign-owned. (§174)

Tax Law Amendment 1976 (C-58).

Denies Canadian advertisers a business deduction for broadcast time purchased on U.S. television stations if the advertising is directed primarily at Canadian audiences.

Broadcasting Strategy for Canada (1983), Ministry of Communications.

Policies: 1) Expand programming choices; 2) Strengthen Canadian programming; 3) Direct Canadian Radio and Television Commission (CRTC) on policy matters; and 4) Abolish satellite dish licensing requirements for individuals.

Proposed Policies: 1) Expand private sector involvement; 2) Provide more French-language programming; 3) Export more programming; 4) Equalize services throughout Canada; 5) Respond to needs of native people; 6) Create a more flexible regulatory environment; and 7) Revise legislative framework for broadcasting.

Federal Republic of Germany

17th Order for Amending the Telecommunications Regulations. Adopted September 4, 1981 by the Administrative Council of the Deutsche Bundespost. Federal Law Gazette 1, p. 97. September 26, 1981. Entered into force, January 1, 1983 with regard to introduction of usage-based tariffs for fixed connection and a system surcharge for PBX's.

Changes tariffs for fixed connections based exclusively on distance to usage-based tariffs. Brings tariff basis for fixed connections in line with existing policy for switched connections.

Prevents realization of special interests of specific user groups at the cost of the majority of customers of the Deutsche Bundespost. Harmonization of tariffs is oriented toward anticipated new regulations for digital C facilities and their analogue connections.

TREATIES AND AGREEMENTS

Guidelines on the Protection of Privacy and Transborder Flows of Personal Data. Organization for Economic Cooperation and Development. Paris, France, September 23, 1980. 21 Signatories. (A nonbinding agreement.) (The United States is a signatory.)

Scope. Covers all personal data, except in countries which choose to apply them only to data in electronic systems. (Part One)

Principles of national application. (1) Limits collection of personal data to that collected lawfully and with knowledge or consent of subject; (2) Requires that data be relevant, accurate, complete, and timely; (3) Requires specification of purpose of collection at time of collection; (4) Requires reasonable security safeguards; (5) Requires openness about practices and policies respecting personal data; (6) Requires that data subject has the right to learn whether there is data on him in files, to learn what data there is within a reasonable time, at a reasonable fee, and in an intelligible form, a right to reasons for denial of information about him, and a right to challenge and correct erroneous data; and (7) Requires that a data controller within each organization maintaining personal record systems be accountable for complying with measures to effectuate the principles. (Part Two, 7-14)

Transborder data flow. Signatories are to ensure that transborder flows of personal data are secure and uninterrupted; that they are unrestricted, except when being transmitted to countries not in compliance with the Guidelines; and, that there are no national privacy protection laws that create obstacles to transborder data flow, where the laws exceed requirements for such protection. (Part Three)

National implementation. Signatories should encourage implementation of the Guidelines through appropriate legislation; self-regulation; by allowing individuals to excercise their rights; by providing adequate sanctions and remedies for noncompliance; and by ensuring no unfair discrimination against data subjects. (Part Four)

Council of Europe Convention for the Protection of Individuals with Regard to Automatic Processing of Personal Data (1980). Adopted September 18, 1980, Strasbourg, France. Sweden has ratified. (The United States is not a signatory.)

Purpose. Seeks to secure respect for individual privacy of information in electronic data systems. (Ch. I, Art. 1)

Scope. Applies to personal data in electronic data systems in the public and private sectors but may also apply to legal person (corporate) data or to manual record systems if a signatory so indicates. (Ch. I, Art. 3)

Principles. (1) Requires lawful and fair collection, processing, and storage of data which is adequate, relevant, and not excessive for the purpose for which maintained, which is accurate and timely and is purged when no longer necessary; (2) Sets out safeguards for certain sensitive data; (3) Requires appropriate security measures; (4) Establishes rights in data subjects to establish the existence of files about them, to learn whether data is maintained about them and the nature of the data, to correct or erase data maintained contrary to national law of the signatories, and to obtain a remedy if erasure or correction is denied; and (5) Permits derogations in the interests of national security, public safety, monetary interests, or criminal justice. (Requires signatories to establish sanctions and remedies for violation of domestic data protection law.) (Ch. II, Arts. 4-11)

Transborder data flow. Prohibits Parties from restricting or regulating transborder flows of personal data to the territory of another Party, except when the Party's national legislation includes specific regulations for certain categories of data (unless the receiving Party has equivalent provisions); or when there is transborder flow from a Party's territory to a non-contracting state through the territory of another Party, so that the transfer does not result in circumvention of the national legislation of the sending Party. (Ch. III)

European Community Resolution on the Protection of the Rights of the Individual in the Face of Technical Developments in Data Processing. Tuesday, March 9, 1982. Official Journal of the European Communities, 5.4.82., No. C87/39. Proposed by the Legal Affairs Committee for adoption by the European Parliament but not yet acted upon. (The United States does not participate in the European Parliament.)

Calls upon Member States to sign and ratify the Convention of the Council of Europe, and believes that the European Community should in due course accede to the Convention.

Recommends adoption of a Community Directive to ensure that (1) the same level of protection from electronic technologies be afforded personal records in both the public and private sectors; (2) rights of data subjects to access to and correction of records; (3) introduction of liability for culpable damage; and (4) establishment of national notice provisions for establishment of electronic data banks.

Universal Declaration of Human Rights, United Nations, 1948. G.A. Res. 217(III) of December 10, 1948. (The United States is a signatory.)

Privacy. Prohibits arbitrary interference with individual privacy. (Art. 12)

Freedom of opinion and expression. Grants the right to hold opinions without interference and to seek, receive, and impart information and ideas through any media, regardless of frontiers. (Art. 19)

European Convention on Human Rights, 1954 (Council of Europe). Signed at Rome on November 4, 1950. Eur. T.S. Vol. 5; 57 UNTS 103. (The United States is not a signatory.)

Privacy. Espouses a right to respect for each person's private and family life, home, and correspondence. Prohibits public authorities to interfere with the exercise of this right except in accordance with law as necessary in a democratic society, for national security, public safety or economic well-being, crime prevention, protection of health and morals, or protection of the freedom of others. (Art. 8)

Declaration on Mass Communication Media and Human Rights, Consultative Assembly of the Council of Europe, Resolution, 428, 1970. (The United States is not a signatory.)

Declares that the press and other mass media have a right of freedom of expression and independence from state control or private monopoly, and that special measures are necessary to ensure freedom of foreign correspondents. (Part A)

Declares that there should be protection of the individual against interference with right of privacy where this is in conflict with his right to freedom of information. Identifies computerized data banks as particularly likely to make an individual vulnerable, and recommends the restriction for purposes of taxation, pension schemes, social security, and similar matters. (Part C)

General Agreement on Tariffs and Trade, 1969. 55 UNTS 194. (The United States is a signatory.) (See Ch. V for more detailed reference to the GATT.)

Cinematograph films. Requires that any party maintaining quantitative regulations relating to exposed cinematograph films conform to certain formulas for screen quotas for films of national origin and foreign films, and that screen quotas are to be subject to negotiation for their limitation, liberalization, or elimination. (Art. IV)

Constitution of the Universal Postal Union. Vienna, Austria, 1964. Official French Text: Constitution et Reglement General de l'Union Postale Universelle, Bern 1965, p. 5. English Text: British Post Office HMSO, Command paper No. 3141. (The United States is a member.)

Scope and objectives. Members comprise a single postal territory for the reciprocal exchange of letter post items. Guarantees freedom of transit throughout the entire territory of the Union. (Art. I)

Universal Postal Convention. Lausanne, Switzerland, July 5, 1974. TIAS No. 9961, __ UST __; Done at Rio de Janeiro, Brazil on October 26, 1979; Entered into force for the United States March 1, 1981. Rules applicable in common throughout the international postal service concerning letter post services.

Deals with freedom of transit. Creates obligation for each postal administration to forward closed mail and decouvert letter-post items by the quickest available routes. This includes insured letter service through a territory that does not provide such service or accept liability. Sets out rules for forwarding postal and air parcels. If a member fails to provide freedom of transit, other members may discontinue their postal service with that country. (Arts. 1, 2)

United Nations General Assembly Resolution on Direct Broadcast Satellite. December 10, 1982. (New York Times, Saturday December 11, 1982, p. 6.)

Contains principles governing the use by nations of artificial earth satellites for international direct television broadcasting.

Purpose. Directs that activities in international DBS should be carried out in a manner compatible with the sovereign rights of states, including recognition of nonintervention, as well as the right to seek and receive information. (A.1)

Rights and benefits. All states should have access to DBS technology without discrimination, and special consideration should be given to the needs of the developing countries in the use of international DBS in order to accelerate their national development. (C.5)

Dispute settlement. Directs that international disputes should be settled through procedures established for peaceful dispute settlement in accordance with the UN Charter. (E.7)

Responsibility. Directs states to bear international responsibility for DBS activities within their jurisdictions, and international organizations to share responsibility between themselves and member states. Directs any state intending to establish a DBS service to immediately notify the proposed receiving states of its intentions and to consult with these states upon request. (F. 8,9, J.13)

Rules on International Police Cooperation and on the Internal Control of Interpol's Archives. Approved by the General Assembly of Interpol October, 1982. Awaiting final ratification by the French government.

Purpose. Protects police information processed and communicated within the ICPO-INTERPOL international police co-operation system against any misuse, especially to avoid any threat to individual rights. (Art. 1 (2))

Supervisory board. Sets up a board for the internal control of INTERPOL's archives, to function according to the terms agreed on between ICPO-INTERPOL and the French government, and to consist of five members from different countries; three of which have held senior judicial posts, one of whom is a member of the Executive Committee of ICPO, and one of whom is an expert on electronic data processing. (Arts. 15, 16)

Supervisory board: duties. Requires board to meet at least once a year and to verify that personal information contained in the archives is obtained and processed legally, recorded for specific purposes and not used for incompatible purposes, is accurate, and is kept for a limited time. Requires the board to make available a list of the archives of automated records which ICPO-INTERPOL is required to keep, and to verify at the request of nationals of member states that personal information held about them complies with conditions set out in the agreement. (Arts. 21, 22, 23)

Appendix 1. Agreement between the Government of the French Republic and the International Criminal Police Organization Regarding INTERPOL'S Headquarters and its Privileges and Immunities in France.

Data Declaration: Proposal by the United States Delegation to the OECD, Directorate for Science, Technology, and Industry, Committee on Information, Computers, and Communications Policy. Originally submitted March 5, 1982. Currently pending.

> Members agree that wide cooperation in telecommunications, data processing, and information policy is necessary; that problems can be significantly reduced through close cooperation among member governments; and that the needs of member governments can best be met in a climate that encourages and rewards innovation.
>
> Members declare that they should maintain and improve an open system of international information flows; avoid restrictive measures that can disrupt these flows, impede trade in telecommunications or data processing, and inhibit growth; and continue efforts to consult on issues covered by the Declaration.

RELEVANT ACTIVITIES OF KEY INTERNATIONAL ORGANIZATIONS

Organization for Economic Cooperation and Development (OECD)

Committee for Information, Computer, and Communications Policy
Chairman, Johan Martin-Lof, Sweden
Vice-Chairmen, currently from United States, France, Italy, and Finland.
There is a Working Group on Transborder Data Flow under the jurisdiction of this Committee.

Meetings

Twice a year. This Committee, which was a working group under the jurisdiction of the Committee for Science and Technology until April 1982, developed the OECD Privacy Guidelines (see Treaties and Agreements, above) which were adopted in October 1980. It also instituted the study of intra-corporate transborder data flows of multinational firms which is currently underway.

Agenda

Includes work on a study of information technologies, productivity, employment and working conditions, international computer and communication statistics, a report on software production, a follow-up on compliance with the Privacy Guidelines (held in March 1983), proposals for work on the international implications of changing market structures in telecommunications services (follow-up on a December 1982 conference), and discussions of vulnerability of society from reliance on computers.

Projects

Include the BIAC/OECD questionnaire to multinational corporations on transborder data flow and the preparation of a document on the legal aspects of transborder data flows for a symposium on transborder data flow to be held in November 1983.
1983 Meeting Schedule:

Working Party on Transborder Data Flow - June 1983 - Paris, France.

ICCP Meeting - October 1983 - Paris, France.

Transborder Data Flow Symposium - November 1983 - London, England.

Intergovernmental Bureau of Informatics (IBI)

Originally established as part of UNESCO to provide assistance to developing countries in the application of information technology. Now an independent organization maintaining close ties to UNESCO. In recent years IBI has provided a forum for the developing nations to discuss the economic, social, and legal effects of information technologies and to promote new "informatics" policies of benefit to them.

Meetings

August 1979: Co-sponsored with UNESCO, an Intergovernmental Conference on Strategy and Policies in Informatics (SPIN). Discussed developing country concerns regarding the dependence on European and U.S. corporations for data processing and communications products and services and the need for greater self-reliance.

June 1980: Hosted a Conference on Transborder Data Flow Policies attended by over 70 countries. The United States was an observer. Established International Working Parties to conduct research and provide analysis during the next two years on topics including 1) data protection and sovereignty and 2) economic and commercial impacts of transborder data flow.

1979: Co-sponsored with Argentine government, the Conference of Latin American Informatics Authorities. Another meeting planned for near future.

1984: Another SPIN conference, to be held in Havana, Cuba, is in the planning stage.

United Nations Economic and Social Council (UNESCO)

Primary forum for discussion of mass media issues. The final report of the UNESCO International Commission for the Study of Communications Problems (see Bibliography, below) raised questions about the relationship between modern telecommunications and information technologies and the production and delivery of mass media programming. Also, UNESCO focuses on social and cultural concerns and their connection with broader information flow issues.

KEY INTERNATIONAL TRANSACTIONAL DATA NETWORKS

Conseil European pour la Recherche Nucleaire (CERN)

The network of the principal high energy physics center in Europe. Data lines are used by persons experimenting in high energy physics research laboratories all over Europe. The data transmitted internationally is purely scientific, concerned with physics research and experiments.

EURONET

The 9 PTTs of the Euronet Consortium and the EEC Commission jointly own EURONET. The PTTs are responsible for its operation. Subscribers may use the network to receive bibliographic and factual data bases concerning a wide variety of subjects.

European Informatics Network (EIN)

A packet-switching network set up as a research project by the COST group (Cooperation europeenne dans le domaine de la recherche scientifique et technique). Any research organization applying successfully to its government for network access may use EIN. Data transmitted internationally relates mostly to research into data processing over networks.

International Criminal Police Organization (ICPO/INTERPOL)

Established to assist the intergovernmental organization whose aim is to further cooperation between all criminal police authorities. Network is used to transmit information required for solving crimes and identifying and tracing criminals internationally.

International Institute for Applied Systems Analysis (IIASA)

IIASA, an internationally financed research institute in Vienna, Austria, uses a network for its energy project. Remote computers carry a data base of statistical and modelling information for developing models of the world energy system.

Societe Internationale de Telecommunications Aeronautiques (SITA)

A corporation owned by about 250 member airlines, in all 800 cities, in over 150 countries. Handles the exchange of commercial, technical, and administrative information via a dedicated network. Transmits two types of information: a) exchange of reservation information in a question-response format; and b) conventional messages regarding administration, management, and plan movements. Uses one hundred seventy-four switching centers around the world for store-and-forward functions. Uses packet-switching technology and a high-level network of 10 computerized switching nodes.

Society for Worldwide Interbank Financial Telecommunication (SWIFT)

Used for international banking communications. Created under Belgian law and wholly owned by the over 850 member banks in over 30 nations. Network includes banks in European, North American, South American, and Far Eastern countries. The system transmits customer transfers, bank transfers, foreign exchange, bond, and stock data and share/credit letters.

World Meterological Organization (WMO)

Operates a telecommunications network called the Global Telecommunications Systems (GTS). Meteorological offices of countries with national centers use the system for the international exchange of meteorological information. This international message switching network consists of a main trunk circuit and branching national and regional circuits.

EXECUTIVE BRANCH INTERAGENCY COMMITTEES

Senior Executive Group on International Communications and Information Policy (See reference in Ch. II.)

Task Force on Transborder Data Flow

James L. Gorman, Chairman
Office of International Communications Policy
Department of State

Members: Staff of NTIA, ITA (in Commerce), Office of Trade, Office of International Telecommunications, Office of UNESCO Affairs (in State), USTR, FCC, Labor, and others depending on the agenda.

Purpose. Develops positions and coordinates decisions on transborder data flow issues particularly regarding participation in the OECD and various UN forums.

Interagency Working Group on Information and Communication

James D. Phillips, Chairman
Office of Communication and UNESCO Affairs
Bureau of International Organizations

Members: AID, U.S. National Commission for UNESCO, USIA, State (Science and Technology and International Organizations), FCC, NTIA, NASA, and DOD.

Purpose. Promotes development of telecommunications and information policy in relation to UNESCO and related organizations.

PUBLIC ADVISORY COMMITTEES TO THE UNITED STATES GOVERNMENT

Working Group on Transborder Data Flow of the Public Advisory Committee on Investment, Technology, and Development

Chairman: Hugh P. Donaghue
Vice President
Government Programs and International Trade Relations
Control Data Corporation

Members: Interested members of industry, labor, or academia.

Government liaison: Philip T. Lincoln, Jr., Office of Investment Affairs, Department of State

James L. Gorman, Office of International Communications Policy, Department of State

Purpose. Exchanges views with the Federal government on U.S. transborder data flow policy and on U.S. preparation for international meetings.

Meetings. Irregular. Announced in Federal Register. The President's Export Council, Trade in Services Subcommittee on Transborder Data Flow. (See Ch. V, Public Advisory Committees to the U.S. Government.)

BIBLIOGRAPHY

Books, Reports, and Articles

Aldrich, Robert F. Privacy Protection Law in the United States. NTIA Report 82-98. U.S. Department of Commerce. May 1982. A comprehensive survey and discussion of U.S. privacy law.

Bayerl, A. Report on the Protection of the Rights of the Individual in the Face of Technical Developments in Data Processing. European Parliament, Working Documents. 1979-1980. Document 100/79. May 4, 1979. 88 pp. Compilation of the work of the European Community and other pan-European organizations in the field of data protection in the 1970's.

Bing, Jon; Petter Forsberg & Eric Nygaard. Legal Issues Related to Transborder Data Flows. OECD, 1981. 89 pp. A discussion of the legal issues in transborder data flow as identified by a European legal research group.

Bortnick, Jane. International Data Flow Issues. Issue Brief Number IB81040. The Library of Congress. Congressional Research Service. Major Issues System. An updated review of activities in Congress, the Executive Branch, and internationally in the area of transborder data flow.

Commission of the European Communities. European Society Faced with the Challenge of New Information Technologies: A Community Response. Brussels, Belgium. 1979. 48 pp. Summary of a conference of the Heads of State and Government of the Community. Embodies the recognition that the dynamic complex of information industries based on the new electronic technologies offers a major source of economic growth and development.

Commission of the European Community. Study on Data Security and Confidentiality. Section 3: the physical person/non-physical person problem. (Bancilhon, F.; J.P. Chamoux; A. Grissonnanche; L. Joinet) January 1980. Report discusses the legal distinctions between legal and physical persons and the policy arguments for and against, including legal persons within the purview of data protection legislation designed to protect information about individuals.

Cornell International Law Journal. "Teleinformatics". Vol. 14, No. 2. Summer, 1981:

Eger, John M. "The Global Phemenon of Teleinformatics: An Introduction." pp. 203-236.

Ramsey, Thomas J. "Europe Responds to the Challenge of the New Information Technologies: A Teleinformatics Strategy for the 1980's." pp. 237-285.

Markoski, Joseph R. "Telecommunications Regulations as Barriers to the Transborder Flow of Information." pp. 287-331.
Bortnick, Jane. "International Information Flow: The Developing World Perspective." pp. 333-353.

Fishman, William L. "Introduction to Transborder Data Flow." 16 Stanford Journal of International Law 1 (1980). A general overview of policy issues in transborder data flow.

Gottlieb, Alan; Charles Dalfen, & Kenneth Katz. "Transborder Transfer of Information by Communications and Computer Systems: Issues and Approaches to Guiding Principles," 68 American Journal of International Law 227 (1974). The Canadian authors analyze several major issues in transborder data flow including that 1) each country has a right to prohibit unwanted broadcast signals from another in order to avoid political and economic exploitation; 2) no country should be allowed to forbid the gathering of environmental information through remote sensing satellites, especially if that country has first right of access to the information; and 3) a country storing data about a foreign person (natural or legal) must abide by certain rules to insure privacy.

Hogrebe, M.E. Legal Persons in European Data Protection Legislation: Past Experiences, Present Trends and Future Issues. OECD. 1981. 63 pp. An analysis of the legal persons provisions of the data protection laws of Austria, Luxembourg, Norway, and Denmark.

Lindop, Sir Norman. Report of the Committee on Data Protection. Presented to Parliament by the Secretary of State for the Home Department by Command of Her Majesty, December 1978. London. H.M.S.O. reprinted 1981. Historically significant recommendations to the Government of the United Kingdom about legislation to protect automated personal data.

Madec, Alain. Transborder Data Flows: Towards an International Information-Based Economy. Paris, France. June 1982. Report of French Commission on Transborder Data Flows. Sets out the findings of a French Interministerial Commission.

National Security Council of the Presidency of the Republic of Brazil. Special Secretariat for Informatics. Transborder Data Flows and Brazil: The Role of Transnational Corporations, Impacts of Transborder Data Flows and Effects of National Policies. Report to the UN Center on Transnational Corporations. 1982. A comprehensive description of Brazilian telecommunications and informatics infrastructure and policy.

Nora, Simon & Alain Minc, The Information Society. Cambridge, Massachusetts. MIT Press. 1980. Outlines and Informatics program for the French nation.

Pool, Ithiel de Sola, & Richard J. Solomon. "The Regulation of Transborder Data Flows," Telecommunications Policy. September 1979. P. 176. The article explores the thesis that restrictions on transmission

of data across borders can effectively control abuses to data such as invasion of privacy. It finds such restrictions rarely effective because technology of modern telecommunications does not allow easy control over message content, and that there are more effective techniques to restrict abuses to data transmitted electronically.

Report of the Vulnerability Committee (SARK). Stockholm, Sweden. 1982. Describes the work of SARB, the Vulnerability Board appointed by the Swedish government in July 1981 and makes recommendations for a plan of action.

Richstad, Jim & Michael H. Anderson, editors. Crisis in International News, Policies & Prospects. Columbia University Press. New York, New York, 1981. Contains articles written by journalists knowledgeable in the internatinoal communications field from the perspective of Asia, the Pacific, and the United States.

Robinson, Peter. (Canadian Department of Communications) "Transborder Data Flow: International Dimensions." A presentation to the XV National Conference on Informatics, Rio de Janeiro, Brazil, October 1982. Transborder Data Flow, a major focus of international discussion and debate, raises complex, sensitive issues which are in general poorly understood. Wider understanding is necessary to the development of viable solutions, particularly at the international level.

Sweeney, G.P., editor. Information & the Transformation of Society. North Holland. The Netherlands, 1982. 367 pp. Papers from the First Joint International Conference of the Institute of Information Scientists and the American Society for Information Sciences held at St. Patrick's College, Dublin, Ireland.

UN Centre on Transnational Corporations. Transnational Corporations and Transborder Data Flows: A Technical Paper. June 1981. United Nations. New York. 139 pp. Deals in detail with the role of the transnational corporation in communicating and receiving data over transnational computer-communication systems.

UNESCO. Many Voices, One World: Communication and Society Today and Tomorrow. International Commission for the Study of Communication Problems (MacBride Commission). Report on a New World Communication Order. Paris. UNESCO. 1980. 312 pp. Commission's collective vision of communications issues based on the work and ideas of the specialists and governments of participating nations. Subjects include communications and its rational effects on societies, means of communication, problems of transborder data flow, and areas for research on communications issues.

UNECOSOC. Commission on Transnational Corporations. The Role of Transnational Corporations in Transborder Data Flows and Their Impact on the Home and Host Countries, Particulary Developing Countries. June 1982. 27 pp. A work program and progress report on the Commission's studies of transborder data flows and the multinational corporation.

U.S. Congress. House. Committee on Government Operations. International Information Flow: Forging a New Framework. Report. December 11, 1980. Washington, D.C. GPO. 1980. 61 pp. (96th Congress, 2d Session. House. Report No. 96-1535.) Describes the significant issues in transborder data flow and the problems of U.S. industry with restrictions on data flow imposed by other countries.

Periodicals

Information Age. Butterworth Scientific Limited. Surrey, United Kingdom. C.W. Rawlins, Publishing Director. Quarterly. Features a variety of articles on such subjects as data protection, information availability, data security, and privacy.

Transnational Data Report (TDR). North Holland Publishing Company. Amsterdam, the Netherlands. G. Russell Pipe, Editorial Director. 8 issues annually. Focuses attention on national and international activities concerning information policy and regulation.

CHAPTER V

TELECOMMUNICATIONS AND TRADE POLICY

TRADE IN TELECOMMUNICATION EQUIPMENT AND SERVICES

Kenneth W. Leeson and C. Randall Jacobson

Background

In recent years, the merging of telecommunications and information technology and the far reaching applications of computers in international business have greatly increased the volume and significance of trade in telecommunications equipment and services. International networks facilitate remote data processing, and telecommunications itself is becoming more computerized.

In 1982, telephone and telegraph equipment alone, a small part of the industry, accounted for $725 million in U.S. exports and $625 million in U.S. imports. In the same year, U.S. exports of computer related equipment were $8.9 billion and imports, $2.1 billion. 1/ Combined, these two product groups showed an increase in current dollar values over the period 1972-1982 or 580 percent for exports and 1,250 percent for imports.

Revenues of overseas telecommunications transmission services of the five major U.S. international data carriers were $460 million in 1982. 2/ This figure does not, of course, capture the value of such services to users, corporations, or industries.

Because of the growing importance of information technology in the world economy, countries at all stages of development are recognizing the need to promote the expansion of indigenous computer and communications industries. Many are instituting restrictive policies to reduce competition from abroad by targeting these industries for government subsidy and erecting often subtle, non-tariff barriers to trade. Others regard telecommunications as a public service, to be provided by a government agency or a government controlled monopoly. By contrast, the United States and a few other countries are reducing regulation in telecommunications markets and encouraging greater competition among private companies that provide both equipment and services.

These factors have created many strains in international trade relations. It is important to the United States to develop a policy to protect and advance the interests of U.S. business and to promote an open world trading system in telecommunications and information products and services.

Equipment, Services, and Investment

For the purpose of discussion, international trade in telecommunications and information can be divided into three overlapping categories: equipment, services, and direct investment.

Equipment. Trade in equipment pertains to the export and import of physical merchandise. Equipment can be separated into two classes: network or facilities equipment, such as cables, optical fiber, and other major components; and interconnect, customer premises, or terminal equipment, such as standard telephone sets, modems, and sophisticated intra-office switching equipment. Interconnect equipment trade is larger than trade in network equipment, and has received more attention in international discussions.

Services. Trade in telecommunications services pertains to the international exchange of intangible outputs of telecommunications networks, such as telephony, telegraphy, electronic mail, and international data traffic. The latter includes remote data processing and information retrieval from data bases located in different countries.

The issues involved in international trade in telecommunication services are not as clearly defined as those in equipment. A number of conceptual problems remain to be resolved.

First, the actual transmission capability of the telecommunications facility can be distinguished conceptually from the processing of the information being transmitted and from the information itself. It is difficult, however, to separate these components for the purpose of assigning economic worth to them. The value of information may depend on how fast it can be transmitted, or on whether it can be presented in a certain form. Pricing policies, taxation, and other forms of regulating any of these components may affect the other two in unforeseen ways. For instance, regulations of the Federal Republic of Germany (FRG) require that some partial processing of data be undertaken within its borders. The impact these provisions will have on companies with international data processing facilities located in a country other than the FRG is unclear.

The very pervasiveness of telecommunications in world commercial activity is a second consideration. These services are not only sold, but also used internally by international companies and between companies in such industries as banking and air transportation. Companies using telecommunications internally may purchase transmission capacity such as leased circuits and provide their own processing capabilities. While the information being transmitted and processed may be vital to the functioning of the company in such respects as inventory control, account information, and actual transactions, it cannot be assigned an economic value.

Third, many legal questions regarding economic liability in telecommunications remain unresolved, particularly on the international level. For example, it is not clear who would bear liability and to what extent for loss or error during transmission or processing. Resolution of such issues becomes increasingly important as trade in telecommunications and information equipment and services grows.

Investment. Direct investment principally pertains to the operations of multinational enterprises. The avail- ability of telecommunications services and of information technologies is a factor of growing importance in the decision-making process of multinational firms, especially with regard to planning for structure, location, activities, and products and services to be produced and marketed.

There is no clear distinction in trade accounts between trade in services and direct investment undertaken in foreign markets. On occasion, an international services transaction is accomplished over a telecommunications transmission facility or by the subsidiary of a U.S. corporation physically located in the foreign market. A portion of the earned revenues will be repatriated and eventually find its way into the balance of payments accounts. It will not, however, be separately listed under the category "transactions in telecommunications and information," but merged with all other data on foreign direct investment.

International Agreements and Organizations Affecting Telecommunications and Information

The international setting in which trade practices will evolve in the coming years will be influenced by existing international agreements as well as new agreements created to accommodate the changing character of commercial activity in telecommunications and information. The following sections of this paper will review the scope and purpose of some of the existing agreements and organizations intended to promote the orderly advancement of international commerce.

The GATT Codes. The General Agreement on Tariffs and Trade (GATT) is a periodically updated group of codes and agreements negotiated by some 87 countries. The last major revision of the GATT followed the Tokyo Round of Multilateral Trade Negotiations completed in 1979. The United States implemented the GATT with the 1979 Trade Agreements Act. Currently, the GATT covers equipment, but not services trade, or investment.

The GATT Standards Code, -- Agreement on Technical Barriers to Trade Relating to Product Standards--prohibits signatories from imposing unnecessary obstacles to trade through the use of product standards and testing requirements. Technical standards are the equipment engineering characteristics that permit physical coupling and, thus, the establishment of information systems or communications networks in telecommunications.

The United States is implementing this code through Title IV of the Trade Agreements Act of 1979. That Act requires Federal and State agencies and private persons in the United States to: treat imported and domestic products alike; utilize international standards, where appropriate; develop new standards on the basis of performance rather than design criteria; and allow foreign and domestic suppliers equal access to certification systems.

Signatories to the GATT also negotiated a Government Procurement Code during the Tokyo Round, but most countries exempted their telecommunications monopolies (PTTs) from coverage. For economicand national security reasons, these countries recognized a need for a national manufacturing capacity in this high technology area and wanted to ensure that indigenous industry had a customer for its products.

The United States subsequently signed a bilateral agreement with Japan to open procurement on a nondiscriminatory basis between Nippon Telegraph and Telephone Public Corporation (NTT) and U.S. firms.

The OECD Codes. A number of international trade agreements have been signed under the auspices of the Organization for Economic Cooperation and Development (OECD), made up of 24 developed countries. These agreements are generally political commitments and nonbinding on signatories.

The Declaration on Trade of 1980 is a political undertaking on the part of member countries to abstain from creating unnecessary obstacles to trade. Its intent is to reaffirm generally the OECD member's commitment to an open world trading system in a period of recession.

The OECD Code of Liberalization of Current Invisible Operations addresses trade issues in service industries, including information industries. It does not govern international telecommunications services per se, but may have an impact on information services provided through telecommunications media.

The National Treatment Instrument in the Declaration and Decisions on International Investment and Multinational Enterprises of 1976 is one of the major OECD agreements addressing investment issues. It speaks to the national treatment of previously established foreign enterprises and permits screening of incoming foreign investment. A 1979 OECD review of the National Treatment Instrument noted that public services such as telecommunications that are regulated by governments through public monopolies are not included in the Code. The United States has suggested broadening its scope to include the expansion of existing foreign enterprises and their access to financing.

The Code of Liberalization of Capital Movements of 1961 is yet another major OECD agreement that governs investment. Pursuant to its provisions, all of the OECD member countries except Canada have liberalized direct investment by foreign firms. A 1981 OECD review of the Code noted that most countries have, to some degree, controlled investment in telecommunications for national security interests, or because telecommunications is regarded as a public service. The United States is interested in having this Code govern those areas of telecommunications not provided by public monopoly.

CCITT and ISO. The International Consultative Committee on Telegraph and Telephone (CCITT) of the International Telecommunications Union (ITU) and the International Organization For Standardization

(ISO) are two major intergovernmental organizations working toward harmonizing the standards for telecommunications equipment. As technology advances, there is a constant need to develop standards that will ensure the compatibility of telecommunications equipment and the operation of international networks. The work of these organizations is not only constant, but expanding.

Initiatives to Improve Opportunities or Telecommunications Trade

U.S. Initiatives. The U.S. Government recognizes the importance of orderly mechanisms for trade in telecommunications equipment and services. In response to the restrictive policies being implemented in individual countries and activities of international organizations, it is taking a number of initiatives to maintain the open world trading system and to protect the interests of U.S. industry.

GATT Initiatives. During the November 1982 GATT Miniterial Meeting, the United States proposed that studies of services, investment, and high technology trade be undertaken with the possibility of including these activities in future GATT agreements. The proposals concerning investment and high technology trade were vetoed by other GATT signatories. It was agreed, however, that individual countries would prepare papers on services trade as an initial step in the process of negotiating a formal agreement.

OECD Initiatives. The U.S. recently submitted to the OECD for discussion a paper on economic, political, and socil barriers to international telecommunications and information services. Thus far, only the United Kingdom has submitted a similar report. The United States has also proposed that member countries agree to a "Declaration on International Data Flow," similar to the "Declaration on Trade," and representing a political commitment to avoid restricting international flows of information. In the OECD, the United States is also participating in a study of intracorporate international information flows and in discussions of its legal aspects, such as liability for lost or delayed data.

Interconnect Initiatives. In 1980, the United States signed a bilateral agreement with Japan concerning trade in interconnect equipment. The understanding addresses standards-related trade problems. In order to expedite the testing and approval process, the Japanese Government agreed to grant type-approval, rather than require that every imported device be tested.

The United States is currently trying to multilateralize its agreement with Japan, but has confronted many obstacles. In Britain, for instance, foreign equipment manufacturers are discriminated against in the technical approval process run by British Telecom, even though there is movement toward competition in the telecommunications industry.

Bilateral Initiatives. A number of important specific trade problems must, of course, be dealt with on a bilateral basis. Often a trade problem is created by a foreign regulation that unintentionally harms U.S. business, such as the FRG data-processing regulation noted earlier. In other cases, such as foreign government procurement policies, an intentional international trade barrier is created.

Currently, a very important bilateral trade problem is the Nippon Telegraph & Telephone (NTT) Procurement Agreement, negotiated by the United States and Japan when Nippon Telegraph and Telephone Public Corporation was exempted from the GATT Government Procurement Code. The agreement, which will expire at the end of 1983, has resulted in very few U.S. sales to NTT in the 18 months since it became effective. The procurement practices of an 80 year-old monopoly have been slow to change. At the same time, Japanese telecommunications and information equipment exports to the United States have increased so rapidly that many feel they are endangering U.S. industry. The renegotiation of this agreement is very important to U.S.-Japanese trade relations.

Current U.S. Congressional Activity.

Congressional focus on unfair foreign trade practices and their effect on the U.S. balance of trade has increased in the last few years. A special area of concern is the high technology industry, where the United States has competitive products to offer on the world market, but is limited in sales by such earlier noted barriers to trade as targeting practices. Legislation under consideration includes "reciprocity" measures, and the revision of export control policies. A law permitting the formation of export trading companies was also passed late in the 97th Congress.

Reciprocity Legislation. Several bills seeking equitable access to foreign markets for U.S. firms were introduced in the 97th Congress and have been reintroduced in the 98th. Reciprocity provisions specifically covering the telecommunications sector were included in bills to rewrite the Communications Act of 1934 and the Senate bill to deregulate international communications (S.2469). Under these provisions, the Federal Communications Commission would have been authorized to restrict access to the U.S. telecommunications markets by suppliers from countries not providing U.S. firms equitable access to their markets.

The sectoral reciprocity approach has generally been opposed by the Reagan Administration. However, broader reciprocity bills that provide greater negotiating flexibility, that clarify the President's power to retaliate against unreasonable trade barriers under section 301 of the Trade Act of 1974, that expand his authority to take action against unfair practices in services and investment, and that retain trade policy decision-making authority in the Executive Branch were supported by the Administration in the 97th Congress and continue to

receive support in the 98th. U.S. telecommunications firms testifying on the various bills have been inclined to share the Administration's view that sectoral reciprocity legislation may increase rather than decrease protectionist practices abroad.

Export Trading Company Legislation. A related legislative initiative in the 97th Congress was a bill to revise the antitrust laws affecting companies involved in export trade, including trade in services. Public Law No. 97-290, passed on October 1, 1982, allows U.S. companies to form export trading companies and associations. Banks are now permitted to invest in export trading companies, thus providing capital resources. Export trading associations will allow companies producing similar products to pool their marketing resources and increase their exporting effectiveness.

The Act provides both export trading companies and associations exemption from antitrust suits by the U.S. Government through certificates specifying that the Government will not prosecute certain marketing activities of certain products. The Act does not, however, provide immunity from suits brought by private parties or foreign governments. The antitrust measures of this legislation are, therefore, quite limited.

Export Control Legislation. The Export Administration Act of 1979, which controls or prohibits the export of technology deemed militarily critical to various unfriendly countries such as the Soviet Union, expires this year. To a large extent, the Commodity Control List is made up of computer-related products that have possible military and commercial applications. Satellite technology is only one that has been closely controlled by the Government.

The 98th Congress has before it many proposals to amend the Export Administration Act, including one that would reduce the number of products on the Commodity Control List. Another would create an independent Office of Strategic Trade to administer exports. The final provisions of this legislation are of great importance to high technology companies because of their effect on the cost of doing business and access to markets.

Conclusion

Although the U.S. Government is the foremost advocate of an open international trading system, restrictive sentiments exist both at home and abroad. Pressure for legislative measures protecting U.S. industry from the unfair trading practices of major competitors is increasing due to the effects of the recession, high unemployment, and the relative value of the dollar, all of which make United States products more expensive in foreign markets. Telecommunications is one of the high-technology industries that many in the United States have targeted for promotion. Research and development costs are so high that if the U.S. industry falls behind foreign industries, there may be a need to adopt drastic protectionist policies.

FOOTNOTES

1. 1983 U.S. Industrial Outlook, U.S. Department of Commerce.

2. Statistics of Communications Common Carriers, year ended December 31, 1980, Federal Communications Commission. Figure represents revenues from message, telex, and private line services.

UNITED STATES LAWS AND REGULATIONS

Statutes

Trade Act of 1974, 19 U.S.C. §2101, et. seq., Pub. L. No. 93-618, 88 Stat. 1978, 1975, as amended, Pub. L. No. 96-39, 93 Stat. 144 (1979). (This Act was the basic negotiating authority for the Tokyo Round of Multilateral Trade Negotiations.)

Purpose and basic authority. Authorizes the President to negotiate international agreements for the purpose of harmonizing, reducing, or eliminating tariff and non-tariff trade barriers on goods and services, including those adversely affecting the U.S. economy, and preventing fair and equitable access to supplies. (19 U.S.C. §§2102, 2111, 2112, 2113)

Definition of commerce. Expands the definition of commerce to explicitly cover services. (19 U.S.C. §2481(10))

Authority to negotiate. Extends the President's authority to negotiate trade agreements with foreign countries to reduce or eliminate non-tariff barriers. (19 U.S.C. §2111)

Office of USTR. Establishes within the Executive Office of the President, the Office of the Special Representative for Trade Negotiations, now called the Office of the U.S. Trade Representative; and raises the trade negotiator's rank to cabinet level. (19 U.S.C. §2171, et. seq.)

Retaliatory measures. (Popularly cited as section 301 of the Trade Act of 1974.) Authorizes the President to take retaliatory actions against unjustifiable or unreasonable import and tariff restrictions imposed by foreign countries against United States goods, services, and access to supplies in violation of agreements with the United States. Relates this provision to the GATT subsidies. (19 U.S.C. §2135)

Relief from injury caused by import competition:

International Trade Commission. Describes procedures for firms and trade associations filing petitions for eligibility for import relief for the purpose of facilitating orderly adjustment for import competition. Sets out criteria for Commission determinations and procedures for hearings and the report of findings to the President. (19 U.S.C. §2251)

The Trade Agreements Act of 1979, 19 U.S.C. §2501, et. seq., Pub. L. No. 96-39, 93 Stat. 144 (1979).

Approval of trade agreements. Approves and implements the tariff and non-tariff trade agreements negotiated by the United States, under the Trade Act of 1974, in the Tokyo Round of Multilateral Trade Negotiations. Includes implementation of Government Procurement Code, Code on Technical Barriers to Trade (Standards), Customs Valuation Code, and Subsidies and Licensing Codes. (19 U.S.C. §2503)

Waiver of Buy American statutes. Authorizes the President to waive the applications of discriminatory government procurement laws such as the Buy American Act for purchases covered by the Agreement. (19 U.S.C. §2511)

New opportunities for U.S. exports. Directs the President to seek new opportunities for U.S. exports in future negotiations. If negotiations with specific countries did not result in expanded procurement opportunities, the President could recommend legislation to prohibit purchases from those countries by federal agencies not currently covered by the Agreement. (19 U.S.C. §2514)

Tariff Act of 1930, 19 U.S.C. §1202, et. seq., as amended, Pub. L. No. 96-39, 93 Stat. 150, et. seq. (1979).

Countervailing duties. Requires imposition of countervailing duties if the administering authority determines that a country subject to the Agreement on Subsidies and Countervailing Measures (a GATT agreement), or a citizen or corporation within that country, is providing direct or indirect subsidy to the manufacture, production, or exportation of a category of merchandise imported into the United States where the subsidy injures or threatens to materially injure the United States. (19 U.S.C. §1671)

Antidumping duties. Requires imposition of anti-dumping duty, if the administering authority determines that a category of foreign merchandise is, or is likely to be, sold in the United States at less than its fair value, and it is determined that the United States suffers, or is threatened with, material injury, or that the establishment of an industry in the United States is retarded because of importation of this merchandise. (19 U.S.C. §1673)

Unfair practices in import trade. Declares unlawful unfair methods of competition and unfair acts in the importation of articles into the United States, or in their sale within the United States, which tend to destroy, substantially injure, or prevent the establishment

of a domestic industry, or to restrain or monopolize trade and commerce in the United States. Sets out the power of International Trade Commission to investigate and to enforce its decisions. (19 U.S.C. §1337)

Export Trading Company Act of 1982, 15 U.S.C. §4001, Pub. L. No. 97-290, 96 Stat. 1233 (1982). (See also, Bank Export Services Act, 12 U.S.C. §1841, et. seq., 635(A)(c).

Purpose. Increases U.S. exports through enabling the formation of export trading companies which would serve as export intermediaries for U.S. companies. Enables small and medium-sized companies to enter foreign markets using export trading companies as intermediaries combining the capabilities of several companies under one umbrella. (15 U.S.C. §4001)

Role of banks. Permits banks to participate in or own export trading companies under strictly regulated conditions. (12 U.S.C. §1841, et. seq.)

Antitrust provisions. Amends the Webb-Pomerene Act by extending its application to the export of services as well as goods, and by providing for a pre-clearance certification process to ensure that specified activities and methods of operation are not in violation of antitrust laws. (15 U.S.C. §4013)

Financial backing. Directs the Export-Import Bank to provide loan guarantees to export trading companies when the private credit market is inadequate. (12 U.S.C. §635(a)(4))

Implementation. Requires the Secretary of Commerce to promote the formation and operation of export trading companies and to certify them to operate contingent on Department of Justice clearance with respect to antitrust laws. (15 U.S.C. §4011)

Export Administration Act of 1979, 50 U.S.C. §2401, et. seq., Pub. L. No. 96-72 (1979), as amended by the Export Administration Act of 1981, Pub. L. No. 97-145 (1981). Statute expires September 30, 1983.

Purpose. Minimizes uncertainties in export control policy and encourages trade with all countries with which the United States has diplomatic or trading relations except those countries with which such trade has been determined by the President to be against the national interest. Restricts export of goods and technology where necessary to further significantly the foreign policy of the United States; and restricts the export of goods in

order to protect the domestic economy from excessive drain of scarce materials and to reduce the serious inflationary impact of foreign demand. (50 U.S.C. §2402)(C)

Commodity Control List. Requires the Secretary of Commerce to establish and maintain a list consisting of any goods or technology subject to export controls under the Act. Authorizes the Secretary of Defense and other appropriate departments and agencies to identify goods and technology for inclusion on the Commodity Control List. (50 U.S.C. §§2403(b), 2402(2)(C))

Public notice and business consultation. Requires the Secretary to inform the public about changes in export control policy and to meet regularly with representatives of business. (50 U.S.C. §2403(f))

Licenses. Authorizes the Secretary of Commerce to require certain types of export licenses. (50 U.S.C. §§2404(e), 2409)

Control of Arms Exports and Imports, 22 U.S.C. §2778, Pub. L. No. 90-269 (1976).

Authorizes the President to establish a Munitions List which designates items which shall be considered as defense articles or defense services; authorizes the President to promulgate regulations for the import and export of such articles and services (includes satellites). (Export is subject to the Export Administration Act. See above.) (22 U.S.C. §2778)

Foreign Corrupt Practices Act of 1977, 15 U.S.C. §§78m, 78dd-1, 78dd-2, 78ff, Pub. L. No. 95-213, 91 Stat. 1494 (1977).

Restrictions on domestic concerns. Prohibits domestic concerns from using the mails or any instrument of interstate commerce to give or promise to give anything of value to any foreign official for the purposes of influencing the official to make certain decisions; and from inducing a foreign official to use his influence with a foreign government to influence that government's decisions, in order to aid the domestic concern in obtaining, retaining, or directing business to anyone. (15 U.S.C. §78dd-2)

Webb Pomerene Act (Promotion of Export Trade), 15 U.S.C. §61, et. seq., 40 Stat. 516 (1918).

Antitrust legislation. Affirms, with certain conditions, legality of associations formed for the sole purpose of engaging in, and actually engaged in, export trade, or agreements or acts in the course of export trade, provided the associations' activities are not in restraint of trade within the United States and in restraint of export trade of any domestic competition. (15 U.S.C. §62)

Domestic International Sales Corporation (DISC) Act, 26 U.S.C. §§991-997, as added, Pub. L. No. 92-178, 5 U.S.C. §501, 85 Stat. 535 (1971).

Permits a corporation to elect to be treated as a DISC under the tax laws if it meets certain requirements concerning exports. The section defines in detail the DISC rules and regulations affecting it, and the favorable tax ramifications to both the corporation and shareholders.

Buy American Act, 41 U.S.C. §10a, et. seq., 47 Stat. 1520 (1933).

Public use. Requires that only U.S. manufactured, mined, or produced articles be acquired for public use within the United States unless these are unreasonably costly or their use is inconsistent with the public interest. (41 U.S.C. §10a)

Regulations

Trade Agreements Act of 1979, §201, 19 C.F.R. §206. Pursuant to provisions of the Act strengthening section 301 of the Trade Act of 1974, sets more specific time deadlines for section 301 investigations; and relates provision to GATT Subsidies Code.

Export Administration Regulations Enforcement. 15 C.F.R. §387 (1982). Enforcement.

Export Administration Regulations. Technical Data. 15 C.F.R. §379 (1982). (Provisions of section 379 do not apply to "classified" data.)

Technical data defined. Means information of any kind that can be used, or adapted for use, in the design, production, manufacture, utilization, or reconstruction of articles or materials. The data may take a tangible form or an intangible form such as a technical service. (15 C.F.R. §379.1(a))

Licenses to export. Requires that, with limited exceptions, an export of technical data be made under the U.S. Department of Commerce general license or a validated export license. (15 C.F.R. §379.2)

Scientific or educational data. Establishes a general license to export data available to the public in any form. This refers to information not directly and significantly related to design, production, or utilization in industrial processes, or information- used in instruction in academic institutions. A general license is also granted to data contained in a patent application, prepared wholly from foreign-origin technical data where such application is being sent to the foreign inventor to be executed and returned to the United States for subsequent filing with the Patent and Trademark Office. (Requires a validated license for all other categories of technical data.) (15 C.F.R. §379.3)

Commodity Control List. 15 C.F.R. §399 (1982).

An index containing all commodities over which export licensing authority is exercised under the Export Administration Act of 1979. Identifies the destinations for which a general or validated export license is required. Department of Commerce periodically reviews this list. (15 C.F.R. §399)

Export Trade Certificates of Review. Proposed Regulations. 15 C.F.R. Part 325. Comments received by January 20, 1983.

COURT DECISIONS AND ADMINISTRATIVE ACTIONS

European Communities

British Telecommunications Case. European Economic Community Commission. Declaration of December 10, 1982, relating to a proceeding under Article 86 of the EEC Treaty (IV/29877 - British Telecommunications). Official Journal of the European Communities, N.L. 360/36 - 21.12.82 (82/861/ EEC).

Commission found that the United Kingdom Post Office and British Telecommunications (together called BT), public corporations and economic entities, infringed Article 86 of the EEC Treaty in the following ways: 1) by limiting the activities of U.K. telephone and telex subscribers acting as message forwarding agencies to the prejudice of customers in other EEC member states; and 2) making use of telephone and telex installations subject to obligations which have no connection with the assignment of telephone or telex services. Found that this behavior might affect trade between member states when countries of origin and destination of messages are member states. Also found BT in violation of Art. 90(2) of the EEC Treaty by behaving in an anti-competitive manner vis-a-vis member states. Commission ordered BT to terminate any of the restrictions in operation at the time of the decision. (See Treaties and Agreements, below.)

Office of Investigations, International Trade Administration, U.S. Department of Commerce. High Power Microwave Amplifiers from Japan Antidumping Duty Order. 47 Fed. Reg. 31,413 (1982).

Department of Commerce and International Trade Commission (ITC) determined that high power microwave amplifiers from Japan were being sold at less than fair market value and that these sales are materially injuring, or threatening to materially injure, a U.S. industry. Declared all unappraised entries, or warehouse withdrawals, for consumption of this merchandise, made on or after December 31, 1981, to be liable for possible assessment of antidumping duties.

TREATIES AND AGREEMENTS

The General Agreement on Tariffs and Trade. October 30, 1947. 4 Bevans 639, TIAS No. 1700 (1948). General Agreement on Tariffs and Trade, Final Act signed Geneva. Entered into force for United States January 1, 1948. Agreement is supplemented by several significant codes popularly called Subsidies and Countervailing Duties Code, Government Procurement Code, the International Antidumping Code, the Customs Valuation Code, Standards Code, and the Licensing Code.

Most-favored-nation treatment. Requires that advantages given to any contracting party, to any product originating in or destined for any other country, be accorded in like manner to the same product originating in or destined for the territories of all other contracting parties. (Art. I)

Schedules of concessions. Exempts exports from customs duties and all other charges imposed in connection with importation in excess of those authorized by the Schedules. Provides that any contracting party may impose at any time various categories of charges or duties on the importation of products. Contains other provisions regarding the value of the concessions. (Art. II)

National treatment on internal taxation and regulation. Forbids the use of internal taxes or national regulations to discriminate against products of other GATT contracting parties. Guarantees national treatment for products of other GATT contracting parties. (Art. III)

Freedom of transit. Requires freedom of transit through the territory of each contracting party, via the routes most convenient to or from the territory of other contracting parties. (Art. V)

Antidumping duties. Permits levying of antidumping duties on dumped exports. Prohibits a contracting party from levying on any product of another contracting party an antidumping duty in excess of an amount equal to the margin of dumping under which the product is being imported. Defines margin of dumping. (Art. VI)

Countervailing duties. Permits levying of countervailing duties on subsidized imports. Prohibits a contracting party from levying on the product of another contracting party a duty in excess of an amount equal to the estimated bounty or subsidy determined to have been granted on the manufacture, production, or export of such product in the country of origin or exportation. Defines countervailing duty. (Art. VI)

Valuation for customs purposes. Sets parameters for determining the value of merchandise for the purposes of customs duties. (Art. VII)

Prohibition of quantitative restrictions. Forbids quotas based on ratio of imports to exports except in certain limited circumstances. (Art. XI)

Nondiscriminatory administration of quantitative restrictions. Forbids discriminatory administration of import or export quotas, unless all countries are similarly prohibited or restricted. (Art. XIII)

Subsidies and Countervailing Duties Code. General Agreement on Tariffs and Trade: Interpretation and Application of Articles VI, XVI, and XXIII. 31 UST 513, TIAS No. 9619. Done at Geneva, Switzerland, April 12, 1979. Entered into force for United States January 1, 1980.

Purpose. Controls the impact of export and domestic subsidies on trade flows in international commerce. Provides new rules on the use of countervailing duties and other countermeasures to offset the harmful effects of subsidies.

Domestic subsidies. Does not prohibit domestic subsidies, but attempts to regulate the use of domestic subsidies where these might adversely affect the trading interests of other countries.

Government Procurement Code. Done at Geneva, Switzerland, April 11, 1979. Entered into force for the United States January 1, 1981. (No TIAS number as yet.)

Purpose. Provides for national treatment and nondiscrimination in purchase by government entities. Requires government entities covered under the Code to provide nondiscriminatory competitive opportunities to exporters in all signatory countries. To ensure that procurement is conducted fairly and openly, the Code provides detailed procedural requirements, including requirements to publish invitations to bid, to supply full tender documentation, to apply the same qualification criteria to both domestic and foreign firms, and generally to provide full information and explanation at every stage of the procurement process.

Not applicable to services. Does not apply to service contracts (except those incidental to the purchase of goods), national security items, purchases by state and local governments, or purchases by any entity which has not been specified as being

covered. Also, the United States had specifically excluded purchases under small and minority business set-aside programs from the Code's provisions. Does not apply to the Post and Telecommunication Administrations of any of the Members, except pursuant to bilateral agreement. The United States and Japan have such an agreement. (See below.)

Antidumping Code. General Agreement on Tariffs and Trade: Agreement Implementing Article VI. 31 UST 4919, TIAS No. 9650. Done at Geneva, Switzerland, April 12, 1979. Entered into force for United States January 1, 1980.

Purpose. Permits antidumping duties to be imposed when industry in the importing country producing a like product is injured or the establishment of such an industry is retarded by reason of the imports of that merchandise.

Customs Valuation Code. General Agreement on Tariffs and Trade: Agreement Implementing Article VII. 31 UST 4919, TIAS No. 9650. Done at Geneva, Switzerland, April 12, 1979. Entered into force for United States January 1, 1980.

Purpose. Establishes a uniform, fair and predictable international system for the valuation of goods for customs purposes, and precludes the use of valuation systems as non-tariff barriers to trade.

Standards Code. General Agreement on Tariffs and Trade: Technical Barriers to Trade. 31 UST 405, TIAS No. 9616. Done at Geneva, Switzerland, April 12, 1979. Entered into force for the United States January 1, 1980.

Purpose. Discourages and eliminates discriminatory manipulations of product standards, testing, and certification activities without restricting the ability of countries to reasonably protect the health, safety, security, environment, or consumer interests of their citizens.

Application. Not applicable to standards developed by a government body or private company for its own production or consumption or to standards or certification systems which predate the effective date of the Code.

Licensing Code. Import Licensing Procedures. 32 UST 1585, TIAS No. 9788. Done at Geneva, Switzerland, April 12, 1979. Entered into force for United States January 1, 1980.

Purpose. Reduces necessary administrative impediments to trade by simplifying the procedures that importers must follow to obtain import licenses.

Declaration of GATT Ministerial. Geneva, Switzerland, November 24-29, 1982. (United States is a signatory.)

Threats to GATT. Recognizes that the multilateral trading system, of which the GATT is the legal foundation, is seriously endangered by the current crises in the world economy. Contracting parties resolve to overcome these threats. Includes work program for 1980's; safeguards providing greater predictability and clarity; GATT rules and activities relating to developing countries; and dispute settlement procedures.

Services. Recommends that each contracting party with an interest in services of different types undertake a national examination of services issues; that contracting parties exchange information on services issues; and that the 1984 session should review the results of any national studies and consider whether or not there should be multilateral action on services.

Bilateral Interconnect Agreement with Japan (1981).

The Government of Japan agreed that NTT would make type approval available for all classes of customer-provided equipment from January 1, 1981. It also agreed to a number of actions in connection with that equipment including publication of relevant documents, accepting test data from foreign firms on a nondiscriminatory basis, granting type approval expeditiously, educating Japanese consumers regarding foreign equipment, and publishing relevant documents in English.

The government of the United States agreed that nondiscriminatory treatment should continue to be provided to both foreign and domestic suppliers in its interconnect market, in particular, with respect to the measures that the NTT will take pursuant to this agreement. Pursuant to this agreement, the United States will keep its interconnect market open, and use its best efforts to facilitate reciprocally sales to the interconnect market in the United States. (The United States is attempting to negotiate similar agreements with other countries.)

Agreement Between the United States and Japan Relating to Government Procurement in the Field of Telecommunications, With Joint Statement. Exchange of letters at Washington, D.C., December 19, 1980. ___ UST __, TIAS No. 9961. This is a three year agreement. Entered into force for the United States December 19, 1980. Effective January 1, 1981.

The requirements of the Government Procurement Code, negotiated during the Tokyo Round of Multilateral Trade Negotiations (MTN), will be observed for all purchases by Japan's Nippon Telegraph and Telephone Public Corporation, as well as for purchases by all of Japan's central government ministries and agencies.

Agreement Between the United States and Japan Relating to High Technology Trade. Recommendations of the United States - Japan Work Group on High Technology Industries. Exchange of letters February 11, 1983 adopts recommendations.

Principles. Each Government should recognize the potential of high technology industries to contribute to the elevation of family life, the role of government in improving the climate for private sector investments and research, and its responsibility to minimize impediments to free and open trade, and to reaffirm the role of governments in preventing anti-competitive or predatory practices. (IA)

Implementation: joint data collection. Establishment of a Joint High Technology Collection. Task force to begin in semiconductor data collection. Data collection should be done consistent with each country's anti-test or anti-monopoly laws and policy. (IIA 1)

Implementation: solving trade problems. Creates mechansim for discussion of problems of access, especially as they relate to procurement and distribution. Each government should include enterprises of the other country and encourage inclusion of these enterprises in private programs to promote trade in high technology. Each government should take steps to eliminate the use of specifications to discriminate against enterprises owned or controlled by nationals of the other country, and instead use performance criteria for procurement. (IIA 2)

Exchanges of information. The governments should create a government-to-government channel to facilitate the exchange of information on upcoming research and development (R & D) projects; establish mechanisms to answer private sector inquiries regarding patents; open government-sponsored R & D programs, in principle, to enterprises of the other country; and make efforts to promote cooperation in R & D. (IIB 1-5). U.S. government to review impact of U.S. antitrust laws on ability of U.S. enterprises to participate in cooperative R & D programs. (IIB 8)

Licensing technology. Each government should facilitate licensing of patents and technology held by the other government in blocks and families rather than item by item. (IIB 6)

Investment: national treatment. Each government should undertake to ensure that plans for development or nationalization of a high-technology industry include the participation of enterprises of the other country on equal terms. Each government should also undertake to ensure that enterprises of the other country are treated equally in respect to access to investment promotion programs. (IIIB 7)

Consultative Group Coordinating Committee (COCOM) Commodity Lists. (Members voluntarily subscribe, including all NATO nations except Iceland, and Japan. The United States is a member.)

The United States cooperates in this international security export control system to maintain controls over exports to Eastern European and Far Eastern communist countries of commodities mutually agreed to be strategic and related to technical data. These commodites have been compiled into a classified embargo list.

Declaration on International Investment and Multinational Enterprises and Guidelines for Multinational Enterprises. OECD. June 21, 1976. Committee on International Investment and Multinational Enterprises (CIME). (The United States is a signatory to this voluntary agreement. Turkey is the only OECD Member that did not participate.)

Declaration

Considers increased importance of international investment in the world economy and domestic development, the role of multinational enterprises in investment, and the importance of cooperation of members in improving the foreign investment climate.

Declares that members should recommend to multinational enterprises that they observe Guidelines on Investment; that members should accord to multinational enterprises within their territories treatment under their laws and regulations no less favorable than that accorded to domestic enterprises (national treatment); that the declaration does not deal with the right of members to regulate the entry of foreign investment or the conditions of establishment of foreign enterprises; and that members will review these declarations within three years with a

view to improving the effectiveness of international cooperation among member countries on investment-related issues.

Guidelines For Multinational Enterprises

General policies. Urges enterprises to take into account established general policy objectives of the member countries in which they operate, in particular their economic and social goals; to observe national laws concerning information disclosure, taking into account legitimate needs for confidentiality; and to cooperate with local community and business.

Competition. Urges enterprises to refrain from anti-competitive actions in any market by abusing a dominant position of market power; to refrain from participating or purposefully strengthening the restrictive effects of international or domestic cartels or restrict agreements which adversely affect or eliminate competition; and to be ready to consult and cooperate with national authorities whose interests are directly affected in regard to competition issues or investigations.

Science and technology. Urges enterprises to endeavor to ensure that their activities are in accord with the national scientific and technological policies of countries in which they operate, and to participate with the host countries in technological innovation; adopt practices which permit rapid diffusion of technologies, with due regard for protection of industrial and intellectual property rights; and grant licenses for the use of industrial property rights or transfer technology on reasonable terms and conditions.

Declaration on National Treatment

Urges member countries, consistent with their needs, to protect their essential security interests and fulfill commitments relating to international peace and security, and accord enterprises operating within their territories and owned or controlled by nationals of another member country treatment under their domestic laws as favorable as that given to their own domestic enterprises. Has a large number of country reservations to application of national treatment.

Declaration on International Investment Incentives and Disincentives

Recognizes the need to strengthen cooperation among member countries in the field of international direct investment, and recognizes the need to give due weight to the interests of member countries affected by specific laws, regulations, and administrative practices providing official incentives and disincentives to direct investment.

OECD Declaration on Trade Policy, Ministerial Communique of OECD for 1980. OECD. Paris, France. (United States is a signatory.)

Declares that members are to maintain and improve on open, multilateral trade systems within the GATT and to fully and effectively implement the committments set out in the GATT; to strengthen trade relations with developing countries; to avoid trade restrictions which might create snowballing effects; to avoid policies which distort competition; to pursue policies which facilitate positive adjustments to structural changes in demand and production worldwide; to make full use of existing mechanisms for mutual information and consultation; and to review periodically within the OECD main developments and issues in international trade against the background of the objectives of the Declaration.

OECD Code of Liberalization of Current Invisible Operations. December 1976. OECD. Paris, France. (United States is a signatory.)

Purpose. Requires members to eliminate restrictions on current invisible transactions and transfers between one another. Measures to do this are termed "measures of liberalization." (Art. 1a)

Non-discrimination. Where members are part of a special customs or monetary system they can apply measures of liberalization to each other without extending them to other members. Forbids members to discriminate as between other members in authorizing the conclusion and execution of transactions and transfers which are subject to liberalization. (Arts. 9, 10)

OECD Code of Liberalization of Capital Movements. Adopted March, 1982. OECD. Paris, France. (United States is a signatory.)

Purpose. Requires members to progressively abolish restrictions on movements of capital between them to the extent necessary for effective economic cooperation. Measures to abolish restrictions are called "measures of liberalization." (Art. 1a)

Public order and security. Does not prevent a member from acting in interests of maintaining public order, protecting national security interests, and fulfilling its obligations relating to international peace and security. (Art. 3)

Non-discrimination. Forbids members to discriminate as between other members in authorizing the conclusion and execution of transactions and transfers which are subject to liberalization. (Art. 9)

Treaty Establishing the European Economic Community. Rome, Italy, 1957. (United States is not a signatory.)

Customs union free movement of goods. Community based on a customs union which adopts a common customs tariff covering trade in goods with non-member countries. (Art. 9)

Elimination of duties. Member states are prohibited from introducing new customs duties or equivalent charges on imports or exports, or from increasing existing duties. (Art. 12)

Common customs tariff. Member states are expected to enter into agreements to reduce customs duties below the general level of which they could avail themselves as a result of the participation in the customs union. (Art. 18)

Freedom of movement of persons, services, and capital. Provision of services. Requires members progressively to abolish restrictions on freedom to provide services within the Community, from one member to another. Authorizes the Council (of the European Community), by unanimous decision, to extend this opportunity to nationals of non-member countries who are established within the Community. Defines services and distinguishes them from activities relating to freedom of movement of goods, capital, and persons. (Arts. 59, 60)

Dominant position. Prohibits, as incompatible with the Common Market, any abuse by one or more undertakings of a dominant position within the common market, or in a substantial part of it,

in so far as such abuse may affect trade between member states. (Art. 86)

Rules of competition: applicability. Undertakings entrusted with the operation of services of general economic interest or having the character of revenue-producing monopoly shall be subject to the rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them. The development of trade must not be affected to such an extent as would be contrary to the interests of the Community. (Art. 90(2))

RELEVANT ACTIVITIES OF KEY INTERNATIONAL ORGANIZATIONS

General Agreement on Tariffs and Trade (GATT)

The principal international body concerned with negotiating the reduction of trade barriers and with international trade relations. The treaty resulting from its deliberations is also called the GATT. The GATT organization oversees the application of treaty rules and provides a forum for countries to negotiate and work together on trade-related matters.

GATT is responsive to major changes in world economy, such as:

1) shifts in relative economic strengths of nations;
2) emergence of developing countries;
3) trends toward regional or preferential economic groups;
4) monetary and payments problems; and
5) participation of Eastern European countries.

GATT Meetings

Tokyo Round of Multilateral Trade Negotiations - September, 1973-1979. Attended by 100 nations, not all of which are members of the GATT. Focus of meeting was on reduction or removal of non-tariff measures that restrict or distort trade, and on developing a multilateral trading system and international trade relations in the 1980's. Agreements were reached on major tariff cuts, and on a series of Codes. (See above under selected Treaties and International Agreements.)

GATT Ministerials (Scheduled as needed.)

Most recent ministerial was November 1982, in Geneva, Switzerland. (See Declaration, above under selected Treaties and Agreements.) United States objectives were to restore a sense of political will and to link this will to the procedures which back up promises made by other countries. Political commitment made by contracting parties to "resist protectionist pressure in the formulation and implementation of national policy and in proposing legislation." Agreements were reached on a work program for services.

GATT Council (Representatives of national delegations to the GATT meet monthly.)

GATT Standing Committees.

Committees have been established which focus on a range of subjects including antidumping practices, customs valuation, government procurement, subsidies and countervailing measures, import licensing, and technical barriers to trade. The Customs Valuation Committee, for example, is currently studying the issue of software valuation under the Customs Valuation Code.

Consultative Group of 18

Representative group of high-level government officials with responsibilities in the formulation of other countries' trade policies. Responsibilities include following international trade and trade policy developments. Meets 3 times a year.

Organization for Economic Cooperation and Development (OECD)

Trade Committee

Chairman: Frau Helga Steeg, Ministry of Economics, FRG, Bonn, Germany.

Provides consultative mechanism for cooperation on short and long term trade issues of interest to member countries. Developed the OECD Trade Declaration and is responsible for monitoring.

Trade Committee Working Party (General).

Focuses on all Trade Committee issues.

Working Party on East-West Trade.

Focuses on East-West trade issues.

Working Party on Preferences.

Monitors developed country preference systems for developing countries trade.

Committee on International Investment and Multinational Enterprises (CIME)

Chairman: Wolfgang von Dewiz, Ministry of Economics, FRG, Bonn, Germany.

Put together the Declaration and Decisions on International Investment and Multinational Instruments which the OECD adopted on June 21, 1976. (See Treaties and Agreements, above.) The Committee and its working groups are the OECD fora for issues related to the investment instruments. In June 1979, the OECD Council of Ministers adopted a report of the Committee reaffirming the instruments, reviewing practice under them, and outlining further activity.

Working Group on International Investment Policies.

Chairman: A. Gautier, Deputy Director, Ministry of Economic Affairs, Netherlands.

Focuses on national treatment and on incentives and disincentives. Is updating its 1978 report on national treatment for foreign controlled enterprises and has a work program to evaluate investment incentives and disincentives and their effects on international investment flows.

Working Group on the Guidelines (on Investment).

Chairman: P. Levy, Office of External Economic Affairs, Switzerland.

Works with BIAC and TUAC (see Ch. I) to follow up on the Guidelines and their effectiveness. Has been reviewing the development and operations of "national contact points" on the Guidelines pursuant to the 1979 Review. The U.S. national contact point is the U.S. Advisory Committee on International Investment, Technology, and Development. As a result of Working Group discussions, CIME has decided to study multinational enterprises and the structural adjustment process, and has formulated a questionnaire for governments, and for BIAC and TUAC.

FEDERAL EXECUTIVE BRANCH INTERAGENCY COMMITTEES

Cabinet Council on Commerce and Trade

Chairman: The President of the United States

Chairman Protem: Honorable Malcom Baldrige, Secretary of Commerce

Members: Secretaries of State, USTR, Agriculture, Treasury, and Directors of OMB and NSC.

Purpose. Considers issues regarding commerce and trade, including telecommunications trade, and makes recommendations to the President.

Trade Policy Commiteee (TPC)

Chairman: The President of the United States

Chairman Protem: Ambassador William E. Brock, USTR

Vice Chairman: Honorable Malcom Baldrige, Secretary of Commerce

Members: Secretaries of Agriculture, Treasury, Defense, Interior, Labor, Transportation, Energy, State; Attorney General; Director of OMB; Chairman of the Council of Economic Advisors; Assistant to President for National Security Affairs; and Director of U.S. Internal Development Cooperation Agency.

Trade Policy Review Group (TPRG)

Chairman: Michael B. Smith, Deputy USTR

Members: Assistant Secretary level personnel of agencies on the TPC

Trade Policy Staff Committee (TPSC)

Chairman: Frederick Montgomery, Deputy Assistant USTR for Trade Policy Coordination

Members: Office or Director level of agencies on TPC, and an advisor from the U.S. International Trade Commission.

Purpose. First line operating group for the coordination of U.S. trade policy decisions.

Advisory Committee for Export Policy (ACEP)

Chairman: Lawrence Brady, Assistant Secretary for Trade Administration, Department of Commerce

Members: Departments of Commerce, State, Energy, Transportation, Treasury, National Security Council, Arms Control and Disarmament Agency, NASA, CIA, and other agencies as appropriate.

Purpose. Considers primarily national security and foreign policy issues and license applications that are particularly complex. There are similarly constructed committees at several levels of the bureaucracy in order to encourage consensus. A failure to agree at one level moves a decision to the next higher level.

Export Administration Administrative Review Board

Chairman: Lionel Olmer, Undersecretary of Commerce for International Trade

Members and Purpose: Same as ACEP, above.

PUBLIC ADVISORY COMMITTEES TO THE UNITED STATES GOVERNMENT

Advisory Committee for Trade Negotiations (ACTN). 45 Representatives from U.S. industry appointed by the President.

Chairman: Ed Pratt, Chief Executive Officer, Pfizer Industries, New York, New York

Government Liaison: Phyllis Bonnano, Director, Office of Private Sector Liaison, USTR

Members: 45 members from industry, labor, agriculture, services, commodities investors, private citizens, and academia.

Purpose. Provides overall policy guidance on U.S. trade issues. Chief private sector advisory committee for all matters relating to trade policy. Reports to USTR, President, and Congress.

Meetings: Quarterly. Not open to the public.

Industry Policy Advisory Committee (IPAC)

Chairman: Robert W. Galvin, Chairman of the Board, Motorola Corp., Shaumberg, Illinois

Government liaison: Phyllis Bonnano, USTR
(Vacant), Assistant Secretary for Trade Development

Members: Representatives of U.S. industry.

Purpose. Advises the Government on how trade issues effect the economies in their respective sectors.

Meetings: Quarterly. Not open to the public.

Services Policy Advisory Committee
(Members appointed by USTR.)

Chairman: James Robinson, CEO, American Express Co., New York, New York

Government Liaison: Phyllis Bonnano, USTR

Members: Representatives of service industries including banking, insurance law, education, accountancy, consulting, credit labor unions, and brokerage.

Purpose. Advises USTR on all elements of U.S. trade policy as it affects service industries.

Meetings: Three times a year. Not open to the public.

Industry Sector Advisory Committees (ISACs) (Members appointed by USTR and Commerce.)

ISAC 5 - Electronics & Instrumentation

Chairman: Thomas A. Christiansen, Hewlett Packard, Palo Alto, California

Government Liaison: Kay Thompson, Office of International Sector Policy, International Trade Administration, Department of Commerce

Steven Falken, USTR

Members: 37 representatives of the semi-conductor, computer, telecommunications, and instrumentation industries.

Purpose. Advises on trade-related matters in the industries represented.

Meetings: Quarterly. Not open to the public.

ISAC 13 - Services

Chairman: Ronald Shelp, Vice President, American International Underwriters Corp., New York, New York

Government Liaison: Albert Alexander, Office of Service Industries, International Trade Administration, Department of Commerce

Catherine Houser, USTR

Members: 30 representatives of service industries.

Purpose. Advises government on U.S. trade services policy.

Meetings: Quarterly. Not open to the public.

Investment Policy Advisory Committee (INPAC)

Chairman: Dexter F. Baker, President, Air Products and Chemicals, Inc., Allentown, Pennsylvania

Government Liaison: Phyllis Bonnano, USTR

Members: Representatives of U.S. investment community - banks, multinational corps., investment consultants, labor, and agribusiness.

Purpose. Advises USTR on U.S. investment policy.

Meetings: Three or four times a year. Not open to the public.

Advisory Committee on International Investment, Technology, and Development

Chairman: Dr. Isaiah Frank

Government Liaison: Philip T. Lincoln, Executive Office of Investment Affairs, Department of State

Diana Montgomery, Office of Investment Affairs, Department of State

Members: Representatives of private industry, the academic community, labor, the private bar and other professions involved in the subject matter of the committee. No fixed number of members.

Purpose. Provides information and advice on the business, social, and economic implications, as well as the technical feasibility of various proposals for codes of conduct and other international initiatives on subjects relevant to the Committee. Advises the U.S. government as to progress under the 1976 OECD Declaration on International Investment and Multinational Enterprises.

Meetings: Announced in the Federal Register.

President's Export Council

Chairman: J. Paul Lyet, New York, New York, Retired
Chief Executive Officer, Sperry Corporation

Government Liaison: Lionel H. Olmer, Undersecretary of
Commerce for International Trade,
Executive Director

Wendy K. Haimes, Director,
President's Export Council Staff,
U.S. Department of Commerce

Members: Representatives of private industry, Congress, and the Executive Branch. Private sector members, not to exceed 28, are appointed by the President.

Purpose. Serves as a national advisory body on matters relating to U.S. export trade, including the implementation of the President's National Export Policy. Identifies and examines specific problems which business, industrial, and agricultural practices may cause for export trade, and the needs of U.S. industry to expand its efforts. Sent a letter to the President on October 6, 1982, urging more concerted government attention to transborder data flow issues in the context of trade.

Services Subcommittee - Chairman, James Greene, American Express International Banking Corp. Makes recommendations on promotion of service sector exports, including banking services, engineering and construction, insurance, managerial and technical consulting services, and other service industries. Reviews foreign trade barriers and domestic disincentives to exports.

Export Promotion Subcommittee - Chairman, Governor George Busbee. Reviews issues affecting the U.S. competitive position vis-a-vis major trading partners, including disincentives to U.S. technological development and productivity.

Export Administration Subcommittee - Chairman, David C. Scott, Chairman and CEO, Allis-Chalmers Corp., Milwaukee, Wisconsin. Separately-chartered subcommittee of the Council. Reviews matters relating to U.S. export controls and licensing policies, defense exports and East-West trade. It is unique in that many of its members are not members of the President's Export Council.

Meetings: Generally announced in the Federal Register.

Technical Advisory Committees of the Export Administration (TACs)

Appointed by the Secretary of Commerce.

Purpose. Advises and assists as indicated in Export Administration Act, and with respect to questions involving technical matters, worldwide availability and actual utilization of production technology, licensing procedures which affect the level of export controls applicable to any goods or technology, and exports subject to multilateral controls in which the United States participates, including proposed revisions of any such multilateral (COCOM) controls. (See Treaties and Agreements, above.)

Computer Systems Technical Advisory Committee

Chairman: Greg Osborn, Business Manager, Intercontinental Marketing, Intel Corporation, Santa Clara, California

Government Liaison: Harold Smith, Office of Export Administration, U.S. Department of Commerce

Members: Representatives of the computer systems industry, interested government agencies, and intelligence advisors.

Purpose. See above.

Meetings: At least every three months. Not open to the public.

Computer Peripherals, Components, and Related Test Equipment Technical Advisory Committee

Chairman: Daniel H. Carter, Manager, Advanced Systems Planning, Digital Systems Group, Texas Instruments Inc., Houston, Texas

Government Liaison: Steve Czecha, Office of Export Administration, U.S. Department of Commerce

Members: Representatives of computer and components and peripheral products industries, interested government agencies, and intelligence advisors.

Purpose. See above.

Meetings: At least every three months. Not open to the public.

Telecommunications Equipment Technical Advisory Committee

Chairman: Duyck Van Gorder, Director, Private Network and Systems Marketing, GTE Products Corporation, Stamford, Conn.

Government Liaison: Cesare Rosati, Office of Export Administration, U.S. Department of Commerce

Members: Representatives of the telecommunications products industry, interested government agencies, and intelligence advisors.

Purpose. See above.

Meetings: At least every three months. Not open to the public.

BIBLIOGRAPHY

Books and Reports

Bureau of Industrial Economics. U.S. Dept. of Commerce. 1982 U.S. Industrial Outlook. February 1982. Contains statistical information on the U.S. telecommunications equipment industry.

Glenn, Robin Day. Financing United States Exports of Telecommunications Equipment. The International Law Institute, Georgetown University Law Center, Washington, D.C. 1982. 58 pp. Discusses the impact of the difficulty of obtaining adequate financing for U.S. exports of the telecommunications equipment manufacturing industry, and the ways in which U.S. business and government are attempting to address the problem.

International Trade Administration. Foreign Business Practices. Materials on practical aspects of exporting, international licensing and investing. U.S. Dept. of Commerce. GPO. May 1981. Attempts to answer the questions most frequently asked about foreign business operations by providing basic information to solve practical problems. Covers foreign licensing and joint ventures, dispute settlement, Webb-Pomerene associations, and tax benefits under Domestic International Sales Corporation (DISC) law. Lists and annotates foreign patent and trademark laws and treaties. (See Ch. VI.)

Leeson, Kenneth W., C. Randall Jacobson, & Kathleen M. White. Trade issues in Telecommunications and Information. 4 Volumes. National Telecommunications and Information Administration. 1981. Discusses United States trade in the merchandise of information industries, the employment effects of trade in high technology telecommunications and information products, and the promotion of U.S. trade in telecommunications and information products with developing countries.

Office of the United States Trade Representative (USTR). A Preface to Trade. Executive Office of the President, United States Trade Representative, Washington, D.C. 1982. 160 pp. Provides a systematic overview of the evolution of the United States' international trade policy and of the policymaking process in order to provide the private sector with a useful tool of reference respecting Federal activities in the area of foreign trade. Describes functions of significant agencies, contents of important statutes and treaties, and provides a glossary of terms.

Office of the United States Trade Representative (USTR) Report to the Congress on the Economic Effects of the Exclusion of Certain Foreign Government Entities from the Agreement on Government Procurement. Transmitted by the USTR pursuant to section 302(c) of

the Trade Agreements Act of 1979. July/August 1981. Submitted to Congress as fulfillment of the requirement of section 302(c)(1) that the President report on the economic effects of the refusal of some developed countries to allow the Agreement on Government Procurement to cover certain government entities, including telecommunications authorities.

Office of the United States Trade Representative (USTR). Trade Barriers to Telecommunications, Data, and Information Services. September 1, 1981. 13 pp. Sets out in chart form issues, countries, reasons for barriers, types of barriers, and trade implications. This document is currently being updated by the Office of the USTR.

Office of the United States Trade Representative (USTR). Twenty-Sixth Annual Report of the President of the United States on the Trade Agreements Program, 1981-1982. November 1982. Statement of U.S. trade policy including high technology trade, trade in the 1980's, and policy agenda. Discusses major trade activities. Statistical and statutory appendices.

Spero, Joan Edelman. "Information: The Policy Void," Foreign Policy. No. 48, p. 139. Fall 1982. Carnegie Endowment for International Peace. Washington, D.C. Describes the international information debate as changing in direction from privacy to economics. Discusses barriers to data flow as barriers to trade and investment.

Surrey, Walter Sterling and Prof. Don Wallace, Jr. A Lawyer's Guide to International Business Transactions. 2d ed. 1977-1982. Vols. I, 2 and 4. Vol. 3 is about to be published. American Law Institute-American Bar Association. Covers all aspects of international trade law in the collected writings of scholars and practitioners with expertise in each topic. Part I (330 pp.) covers International Trade Regulation including the U.S. trade agreements program, antidumping and countervailing duties law, export controls, East-West trade, Treasury Department regulation, and buy national programs. Part II (444 pp.) is on International Finance and discusses the International Monetary Fund, the World Bank, and other development and assistance institutions. Part IV (471 pp.) is about Regional and Recent Developments.

State Dept. Selected International Organization Activities Relating to Transnational Enterprises. Current Status Report. U.S. Department of State. Office of Investment Affairs. July 1982. Dept. of State, Washington, D.C. 20520. One of a series of periodic reports on selected developments in international organizations which are significant for multinational enterprises.

United States of America - Business and Industry Advisory Committee to the OECD (USA-BIAC). National Treatment: A Major Investment Issue of the 1980's. BIAC Committee on International Investment and Multinational Enterprises. December 1982.

CHAPTER VI

INTELLECTUAL PROPERTY

ELECTRONIC TECHNOLOGIES AND PROTECTION OF INTELLECTUAL PROPERTY*

Carol S. Blumenthal

Property Rights in Information

International telecommunications concerns intricate patterns of interactions among information suppliers, distributors, and users. Several entities may be linked to any one of numerous communications transactions, be it by voice, video, or data transmission, occurring daily. While any given transaction may be relatively inconsequential in scope and time, the information transmitted and received as a whole forms an important commodity that has become the basis of a growing international business. Moreover, while this business requires a large initial investment for hardware, software, and service system start-up and maintenance, it ultimately promises large financial rewards.

Given the tremendous financial commitment dedicated to telecommunications networking, the focal point of inquiry for suppliers, distributors, and users is the nature of property interests and responsiblities in information as a commodity. More specifically, consideration must be given to: who owns or controls transaction information; at what point in the network such property rights attach; and who is responsible for erroneous information transmitted to the purchase?

Domestic Law

The law of intellectual property governs intangible property, such as copyrights, patents, and trademarks. Whether or not it applies to information as a commodity is dependent upon whether someone can have a property interest in information.

When information is bought and sold, it is a business commodity and, therefore, a property interest that warrants protection. U.S. law, however, has historically supported the concept of a free exchange of ideas and information. Accordingly, the law of copyrights and patents does not protect ideas. News as factual information may be freely exploited for personal or commercial gain. Trade secrets law protects certain information but only so long as it remains secret. These are not helpful precedents for those who seek a property interest in information that is the subject of commerce.

The primary issue, then, remains whether information is property subject to legal protection. Short of directly addressing this question, businessmen and legislators, at least in the United States, have focused on the various technological media used to transmit data. For example, by creating economic rights in broadcast or satellite signals Congress has indirectly provided partial protection for the information they carry.

This medium-by-medium approach, however, causes greater difficulty as various media are interconnected in network systems and competing services are developed to utilize them. Indeed, far from providing any comprehensive protection, Congress has created an erratic confusion of partial safeguards, based on inconsistent public policy. Thus, in a period of technological boom in telecommunications development, the courts have been forced to deal with issues left unaddressed in legislation.

For example, an independent television broadcast station must negotiate and pay market rates for each program that it carries which is not produced by the station itself. A cable station in another market, however, can intercept that broadcast station's signal and deliver the same program to its audience for a statutorily set compulsory royalty fee, far lower than market value. 1/ This fee will ultimately be distributed to the owners of the programs that the signal carried, rather than to the broadcast station whose signal was intercepted. Yet, as to programs that the cable operator wishes to show that are not available on intercepted signals, the cable caster is similarly situated to the television station operator. He must negotiate and pay market rates for programs.

Certain television signals, such as WGN in Chicago and WTBS in Atlanta, are available nationally by means of satellite pick-up and retransmission. Companies offering such services, resale carriers, make it possible for cable stations to transmit programming from distant independent television stations. By law, they are not required to pay for passively relaying independent television broadcast signals. 2/ Interception of a subscription television service signal, however, would constitute theft and subject the interceptor to legal penalties.

An individual viewer owning an earth station may receive television signals that are bounced off satellites. If he receives a commercial signal, he is likely operating within the protection of the fair use copyright doctrine and need not pay a fee to program owners, broadcasters, or satellite resale carriers. Unauthorized home reception of a satellite-relayed, pay television signal, however, would amount to copyright infringement. 3/ The problem of unauthorized reception has been solved, in part, by scrambling or encoding of signals. 4/

Individual viewers of a broadcast or cable station may make a recording of a given program, may view it at another time, lend or give it to a friend, or make multiple copies for commercial or non-commercial use. Today, such a viewer is likely committing an illegal act in California, Oregon, Idaho, Montana, Arizona, Nevada, Alaska, Hawaii or Washington. 5/ It is unclear whether this would be illegal in other states.

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International Law

There is no international agreement governing the intellectual property issues of transnational information transfers. Canadian cable stations, for example, regularly transmit U.S. television broadcast signals without paying royalty fees. In Europe, there is a widespread transborder flow of programs as they are taken off the air and retransmitted by cable systems. This is often undertaken by public authorities who are not concerned with claims of private rights.

The Rome Convention that came into force in 1964 6/ grants certain protections to broadcasters against the reuse of their signal content. The treaty protects a broadcast for twenty years. With certain exceptions, any rebroadcasting or reproduction to the public for profit can be made only with the consent of the originating broadcasting organization. The treaty does not, however, affect wire distribution of television signals.

In 1965, a modification to an earlier agreement between nine European nations purportedly gave broadcasters control over wire distribution of their signals. 7/ The agreement, however, grants signatory nations an almost unlimited right to legislate exceptions to its terms. Consequently, it has proved of little importance to international discussion.

Thus, the legal status of any electronic signal carrying information to an international audience remains unclear. Its status may be determined by the medium of distribution or by the domestic law of each country where the signal may be received. International law, however, should provide a basis by which to determine the status of an electronic signal anywhere in the world, regardless of the choice of medium of distribution--normal terrestrial, cable, satellite, or a combination thereof.

Public Policy Issues

International discussion of intellectual property issues in telecommunications can be divided into two areas of inquiry. The first is public policy; the second, its application to particular media.

The first category raises the question of whether to recognize a property interest in information at all. If a property interest does exist, it must be decided whether such interest constitutes a species of copyright or is a totally new type of intellectual property. Indeed, the current absence of a legal scheme from which to work may well necessitate the adoption of a new code of information rights in intellectual property.

There is also the issue of who should own information property rights and the scope of that ownership. Generally speaking, industrialized nations have the technical ability to gather, categorize,

store, and distribute various kinds of scientific, economic, political, military, and entertainment information. Less industrialized countries require access to information for development. Thus, the problem becomes whether information-poor nations should be required to purchase this commodity from the richer nations and whether the same criteria should be utilized for scientific, military, and entertainment data. Suppose satellite-gathered information, entered into a U.S. data-bank, regarding the natural resources of a developing country at issue. Should the developing nation be required to purchase facts about its own resources from another country?

Many nations question the legal right to gather information via satellite from the territorial area of a sovereign nation without obtaining its consent. Yet, a nation cannot effectively prohibit photography of its territory from space. Who, then, should own information which, in one respect, is in plain view? Moreover, should gathering information via satellite be deemed a fair use, available to any with the resources to accomplish it?

Assuming that at least some types of information can be owned, the issue becomes how long private ownership should be protected and whether, with age, data otherwise in someone's control should be brought into the public domain. Further, there must be a determination as to whether information should be sold only at a price set by the owner, or available on a compulsory basis, upon payment of a pre-set royalty fee. Moreover, there is the issue of the collection and distribution of such fees.

The enforcement of proprietory rights also warrants consideration. A telephone contact from any number of international locations can tap a data bank. Information may thus be transferred instantaneously and with no physical documentation, thus making enforcement of property rights a difficult, possibly illusory task.

Media Application Issues

Once principles of intellectual property in information are established, they can then be applied to particular media. Another approach, however, is simply to regulate economic rights on a medium-by-medium basis. The United States has utilized this method in developing its domestic law, and, to some extent, as evidenced by certain agreements, this approach has already been adopted internationally.

Computers. Sophisticated telecommunications networks increasingly are being linked with computer data bases containing commercial, medical, financial, and political information, making it available to banks, businesses, government agencies, and even individuals around the world. The banking industry has led in the development of data telecommunications interconnection. Most major banks now have worldwide networks for internal use.

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The success of financial data services depends upon the speed, accuracy, and security of transactions. Because of the value of certain transactions, such as those involving electronic funds, data transfers have become the target of computer pirates. Questions have arisen as to whether piracy protection should be afforded through proprietary rights in the signal or in the information it contains. Unquestionably, computer crime laws of the various nations must be compatible and enforceable wherever the transaction or the piracy occurs.

Copyright protection is available in many countries to indirectly protect data base information. Copyright, however, guards only the particular format of the data base information, not the data itself. In addition, the scope of such protection has not clearly been established. Under international copyright principles, electronic storage and retrieval system data bases are protected under the concept of compilations. 8/ Accordingly, unauthorized copying of a data base in its particular format and arrangement would be illegal. Data bases, however, are rarely totally reproduced. Rather, selected pieces of information are extracted for reproduction or utilized electronically by another computer.

Often, the items of information gathered for entry into a data base are in the public domain. Since electronic data bases may be randomly accessed, it is nearly impossible to determine the origin of any particular item of information from a private data base or a public source. Thus, enforcing proprietary rights in a data base would create serious problems of proof.

Finally, the principle of fair use, at least in Anglo-American copyright law, allows limited reproduction of copyrighted works for purposes of criticism, scholarship, teaching, or news reporting. Whether this doctrine should apply to electronic data bases or be expanded for Third World nations that seek to increase their information resources are issues that remain unanswered.

Generally, however, the intellectual property issues associated with the medium of computer data transfers are not new. The extent of protection afforded to compilations by copyright principles has long been in question. Increased usage of computers has merely exacerbated an already existing problem.

Satellites. Many nations do not want to depend on information resources retained only in data banks in other countries. The increased usage of satellite photographs to gather data on weather patterns, agricultural allocation, mineral sites, and archeological exploration raises the questions of which countries should be allowed to collect such data, and for what, if any, fee. Further, any restriction of satellite observation will necessarily require the development of a mechanism to control the photographing of eligible sites. Indeed, satellite footprints can cover as much as a third of the earth and do not conform to the vagaries of national borders.

More than mere cameras in outer space, satellites are also growing in importance as a vital link in terrestrial telecommunications networking. Unrestricted by national boundaries, they can intercept and relay transmission signals to far distant parts of the globe. Whether unauthorized interception of the signal or the information should give rise to legal liability, or to what extent, warrants consideration.

Moreover, the issue of proprietary rights in broadcast signals remains unresolved. Broadcasters have argued that these should be governed by copyright principles and given the same protection as a compilation. Under this rationale, the broadcaster would be granted a copyright for ordering and formatting programs through this electronic transmission signal. This, however, raises the same scope-of-protection issues common to other types of derivative works. If such signals cannot be directly protected, however, the question becomes whether satellite transmissions or public events are subject to any property protection at all.

In 1974, the United States and 14 other countries signed the Brussels Convention 9/ extending copyright protection to satellite transmissions. It is designed to prevent "poaching" of signals by "unintended receivers." A key problem which it attempts to solve concerns the balancing of each country's right to decide on its own communications system and the free flow of information. The Convention views interception as an issue of public, rather than private, law and moves the object of protection from signal content to the signals themselves. Rather than creating new rights for broadcasters, it prevents misappropriation of existing rights by precluding redistribution. The Convention, however, does not govern direct reception by the general public, and therefore does not apply to direct broadcast satellites.

Moveover, numerous questions are yet to be answered. For example, whether countries receiving broadcasts should be granted the right of prior consent to program content remains unresolved. Though such a right would give a nation de facto censorship control, an idea unpalatable in some quarters, there is grave concern over propaganda dissemination through satellite transmissions.

Even where broadcast signals are terrestrially protected property, the fact that satellite interception takes place in outer space, where special international treaties govern, gives such action unique legal status. In May of 1976, the legal subcommittee of the United Nations Committee for the Peaceful Uses of Outer Space (COPUOS) agreed on nine areas of concern regarding the international uses of satellites. The subcommittee endorsed the encouragement of "cooperation on a bilateral basis for protection of copyright and neighboring (related) rights by means of appropriate agreement between the interested states..."

With the exception of unauthorized interception, point-to-point satellites which function as relays between earth stations do not pose

problems that are different from those occurring in terrestrial transmissions. Similarly, direct broadcast satellites do not present new intellectual property issues, but merely represent a new technical method for distribution, now achieved through terrestrial broadcasting.

The debate with regard to both point-to-point and direct broadcasting satellites concerns the definition of the term "broadcasting" in relation to copyright law. Satellite broadcasting involves two legs: the transmission of an electronic signal from the ground station to the satellite, the up-leg; and the subsequent transmission from the satellite to the community or individual receiver, the down-leg. The latter is generally viewed as an act of broadcasting under international copyright principles. The status of the up-leg, however, has been the focus of much discussion.

One view holds that the up-leg to both point-to-point and direct broadcasting satellites does not constitute a broadcast because such transmissions are not intended for direct reception by the public. If this view were adopted, the transmission to the satellite, without any payment of royalties to copyright owners whose material is included in the signal, would not constitute an infringement. Copyright owners could demand payment for the down-leg broadcast, however, so they would receive royalties when the up-leg and down-leg transmitting parties were the same.

Another view holds that the up-leg does constitute a broadcast, or that appropriate legislation is needed to bring it within the purview of copyright protection. It is based upon the theory that if the down-leg and up-leg transmitting parties are not the same or are residents of different countries, a copyright owner may lose control of his work. The same loss of control occurs where the copyright law in the signal receiving country is non-existent or inadequate to protect foreign works or copyright owners.

As a practical matter, copyright works may be controlled in different countries by rights holders who have no direct relationship with one another, nor any financial interest in distribution of a work beyond the borders of a particular nation. Unlike distributors, then, rights owners do not necessarily have an immediate stake in the development of an expanding international broadcast system.

Video. The term video covers an extraordinary variety of new technologies, such as video games, cassettes and disks, and a host of non-broadcast television services. In order to distinguish between the technologies and the programs they contain, the World Intellectual Property Organizations (WIPO) has adopted special terminology. "Videogram" refers to both the tape, disk or cassette, and program content; "video copy" refers to the reproduction of a pre-existing work; and "videographic work" refers to an intellectual property creation to be affixed to a videogram.

Video copies also do not present any novel intellectual property problems. Rather, their status is dependent upon the legal status of

the videographic work and the scope of protection afforded to it. The simple act of affixing a pre-existing work to a videogram in no way alters its legal character. Determining the legal status of videographic works, however, and whether they can be assimilated into cinematographic works in the traditional copyright sense proves to be more problematic.

The difficulty lies in the very nature of videograms. They are relatively simple, highly movable carriers that are at the public's disposal for private, public, commercial, or non-commercial use.

It has been suggested that the creators of videograms and sound recordings be protected by a single, standard compensatory royalty based upon the sale price of recording equipment and blank cassettes. With one exception, such a system would correspond with the rules of the German Copyright Act. 10/ In Germany, the fee is based only on the recording equipment, inasmuch as it would be impossible to establish in advance how the buyers would use the cassettes. Thus, purchasers of video cassette recorders in effect pay an indirect royalty for the opportunity to reproduce videographic works, since the added cost of manufacturing is undoubtedly passed on to the customer.

The pivotal issue evoked by this controversy is whether to allow the reproduction of videographic works for personal use, free of charge. In the Anglo-American tradition, the solution to this problem necessarily entails the balancing of an intellectual property owner's right to protection with society's right to access to information. While Congress has not yet acted on this issue, a partial answer may be forthcoming from the Supreme Court which recently heard arguments in the much publicized Betamax case, 11/ wherein Universal Studios and Walt Disney Pictures, copyright owners in videographic works recorded from broadcast transmissions, sued manufacturers, distributors, and an individual owner copier of video cassette recorders.

The idea of permitting free reproduction for personal use raises the question of whether to extend the policy to commercial uses as well. Moreover, the manner in which royalties would be enforced and distributed if built into the price of recording equipment or cassettes would warrant further consideration.

There already exist difficulties in collecting and distributing royalties nationally. On the international level, the problem is magnified exponentially. In addition, enforcing such payments may not be practical inasmuch as individual countries, including the United States, have failed to develop any unified policy concerning when royalties are appropriate, much less, how royalty payments are to be distributed and enforced. Indeed, Third World nations that are information-poor favor free access to information, while industrialized countries which create the programs and distribution systems favor some type of fee for their use.

For the moment, creators of videographic works must look to the existing international copyright regimes for protection against reproductions of their works. In effect, a copyright owner has only the protection afforded by the nation where the copying occurs and copies are sold. In potentially important markets like Taiwan, this means no protection whatsoever.

Intellectual Property Laws of the Various Nations

Most nations do not have laws addressing the vital issues of property rights in information or new technologies. Too often this means that no protection is available to businessmen seeking legal rights to control their commodity.

China, for example, represents a vast potential market for a variety of businesses and has a rich and lengthy intellectual history, but has no intellectual property laws. The same is true for Saudia Arabia, a developing country where much foreign business is conducted. The Saudi government does, however, provide a procedure for publishing patent notices to warn potential infringers and does permit infringement cases to be brought before its Committee for Settlement of Commercial Disputes. 12/ Further, this Government does not require the registration of technology brought into the country, as do other nations such as Brazil. 13/

Even where a history of intellectual property law exists, it is woefully inadequate to cope with new technological developments. For example, while U.S. copyright law now governs computer programs, the scope of such protection is still at issue.

Similar inadequacies are evident in European laws. Computer programs may be copyrighted in Austria, France, Germany, the Netherlands, Switzerland, and elsewhere. In such countries as France and Belgium, a copyright provides the programmer with a right of destination, enabling him, upon adequate notice, to make any commercial distribution of the program, dependent on his authorization. In West Germany, the programmer alone has the right to distribute, sell, hire, or offer the program to the public. 14/

In addition, France has encountered difficulty in determining the patentability of computer programs, as have Austria, West Germany, the Netherlands, and Switzerland. These countries require that an invention have industrial applicability to be eligible for protection. A computer program however, is viewed as being limited to providing a series of instructions for the mathematical solution of problems, and not producing immediate industrial results.

Even after a patent is issued it is unclear whether the owner can exploit its use internationally. Andean Pact (Andean Regional Common Market) regulations, 15/ for example, have long restricted payments of royalties by Columbian, Venezuelan, Ecuadorian, Peruvian, or Bolivan companies or registered branches of foreign companies under licensing

or technical assistance agreements. Such regulations specifically impinge payments to affiliated, foreign-owned companies. There has been an attempt to ease their harsh effect by engaging in outright sales of patents and copyrights.

Conclusion

It is important to recognize that most nations do not endorse the free flow of information as vehemently as does the United States. Thus, it is imperative that companies interested in international telecommunications be sensitive to the national goals of those countries in which they intend to do business. Further, little progress can be expected from intellectual property discussions on the international level until firm domestic policies are established. For the moment, then, businesses involved in telecommunications networking can only guard their intellectual property by means of outdated statutory regimes and creative contractual solutions.

FOOTNOTES

1. See 17 U.S.C. §111.

2. See §111(a)(3).

3. See 17 U.S.C. §106 and §111(b).

4. Unauthorized reception and decoding of such signals is a violation of law under §605 of the Communications Act, 47 U.S.C. §605.

5. Cf. Universal City Studios, Inc. v. Sony Corp. of America, 659 F.2d 963, 969 (9th Cir. 1981), ("off-the-air copying of copyrighted audiovisual materials by owners of videotape recorders in their own homes for private noncommercial use, constitutes an infringement"), cert. granted, 102 S. Ct. 2926 (1982).

6. International Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organizations. Rome, 1961. UNESCO Copyright Bulletin, Vol. XIV. pp. 173-182 (English).

7. European Agreement on the Protection of Television Broadcasts. June 22, 1960. European Treaty Series No. 34, Copyright Laws and Treaties of the World. Protocol signed January 22, 1965. Entered into force March 24, 1965.

8. See, for instance, 17 U.S.C. §103.

9. Convention Relating to the Distribution of Programme - Carrying Signals Transmitted by Satellite, 1974. Copyright Laws and Treaties of the World, Vol. III, Multilateral Conventions, Satellite Convention, Item E-1.

10. Copyright Laws and Treaties of the World, Vol. II, Item 1.

11. Universal City Studios, Inc. v. Sony Corporation of America, 659 F.2d 963 (9th Cir. 1981), cert. granted, 102 S.Ct. 2926 (1982).

12. Rous, "Patent, Copyright and Trademark Protection." Saudi Business. August 1, 1979.

13. Normative Act 22/82, December 7, 1982. (Requires registration of all computer programs utilized in Brazil; creates three categories of programs; and provides penalties for failing to register or using unregistered programs.)

14. See generally, Copyright Laws and Treaties of the World, Vol. III.

15. Andean Agreement of Subregional Integration, Decision No. 24, May 26, 1979, of the Commission of the Cartagena Agreement, as amended. See generally, S. Juncadella, "The Foreign Investment Laws of Latin America - Present and Future," 16 International Lawyer 463 (1982).

UNITED STATES LAWS AND REGULATIONS*

U.S. CONST. art. I, §8, cl. 8

> Provides Congress with the power to promote the progress of science and the useful arts, by securing for limited times to authors and inventors exclusive rights in their respective writing and discoveries.

Copyright Protection

Copyright Law of the United States of America, 17 U.S.C. §101, et. seq., Pub. L. No. 94-553, 90 Stat. 2541 (1976).

> Scope of protection. Extends only to original works of authorship fixed in any tangible medium of expression now known or later developed. Does not protect ideas, processes or systems of operation; only physical representations thereof. (17 U.S.C. §102)
>
> Exclusive rights conferred. Copyright owner alone may, or may authorize another to, reproduce, prepare derivative works, distribute copies for public sale or other transfer of ownership, public performance and public display. (17 U.S.C. §106)
>
> Limitations upon exclusive rights:
>
> 1) Fair Use. Limited right to reproduce or make other use of copyrighted work with freedom from liability or payment of royalty, provided the use is nonprofit, educational, not a substantial taking, and will not adversely impact upon market for work, among other factors. (17 U.S.C. §107)
>
> 2) Reproduction of single copies for library and archival use, pursuant to statutorily prescribed procedures. (17 U.S.C. §108)

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*The material for this chapter was prepared by Rosalind S. Kurz, Esq., Meyer, Faller & Weisman P.C.; Washington, D.C.

3) Exemption from liability of certain performances and displays of protected works, primarily in connection with non-profit, educational, governmental, and religious use. Also exempts wholly private, noncommercial reception of public transmission on signal receiving apparatus. (17 U.S.C. §110)

4) Exemption for passive carriers involved in a secondary transmission of information. (17 U.S.C. §111(a)(3))

5) Retransmission by a cable system of information may take place without copyright owner's permission so long as a royalty is paid. Jurisdiction of Copyright Royalty Tribunal to determine and distribute royalties to creators for works retransmitted which have been collected by the Copyright Office. (17 U.S.C. §111)

6) Limited right to make an ephemeral recording. (17 U.S.C. §112)

Duration of right. For life of author plus fifty years. (17 U.S.C. §§302-304) Right may be transferred and licenses granted for exercise of exclusive rights. Copyright is a bundle of rights transferable in whole or in part. (17 U.S.C. §§203-205)

Remedies for infringement. Injunction, impounding of infringing articles, payment to owner of damages and profits retained from infringement, statutory damages, and attorney's fees. (17 U.S.C. §§502-504)

Remedies applicable to alteration of programming by a cable system. Criminal penalties for willful infringement for commercial advantage. (17 U.S.C. §§506-510)

Protection of computer software. Provides explicit federal copyright protection for computer software, as an amendment to the Copyright Act. May be interpreted as extending to information in electronic form. (17 U.S.C. §117)

Patent Protection

The Patent Act of 1975, 35 U.S.C. §101, et. seq., Pub. L. No. 93-596, 88 Stat. 1949 (1975).

Scope of protection. Grants to invention short-term monopoly in devices, processes, compositions of matter, and designs which embody their ideas. To gain protection, must be a new and non-obvious useful process, machine, or improvement. Inventor must diligently pursue act of inventing, or may abandon property right in invention. (35 U.S.C. §§101, 102)

Exception. Invention cannot be patented if patented or described in a printed publication in this or a foreign country, in public use, or if on sale in this country, more than one year prior to the date of application for patent in the United States. (35 U.S.C. §102(b))

Non-obvious subject matter. Patentability is negated "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the inventory art..." (35 U.S.C. §103)

National Space Program Patent Provisions, 42 U.S.C. §2457, Pub. L. No. 85-568, 72 Stat. 435 (1958).

Inventions to be U.S. property. Inventions made in the performance of work under contract to the National Space Program become the exclusive property of the United States. Provides for awards to individuals as compensation; to be made by the Administrator of The National Aeronautics and Space Administration (NASA) and the Inventions and Contributions Board. (42 U.S.C. §2458)

Trademark Law

Lanham Act, 15 U.S.C. §1051, et seq., Pub. L. No. 489, as amended by Pub. L. No. 87-772 and Pub. L. No. 93-596, 88 Stat. 1949 (1975).

Proscribes affixation or use of false designations of origin or false descriptions or representations in connection with any goods or services. (15 U.S.C. 1125(a))

Trade Secret Law

Common law rights available in the majority of United States, state jurisdictions:

Protects proprietors who use a formula, pattern, device, or compilation of information in their business which gives them an advantage over competitors who do not have knowledge or use of it. Key to asserting trade secret protection is a concerted effort by the secret's proprietor to maintain confidentiality. See 4 RESTATEMENT OF TORTS (1938), Paras. 757 and 785, which forms the basis of interpretation for trade secret law in most jurisdictions.

Unfair Competition Law

Proscribes misrepresentation as to the nature or origin of products. Only available to the extent that protection sought is not preempted or in direct conflict with federal intellectual property laws. Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964).

Administrative Agency Action Relevant to Intellectual Property Telecommunications Issues

Communications Act of 1934, 47 U.S.C. §605, 48 Stat. 1103(1934).

Prohibition of signal interception. Prohibition on interception of signals does not apply to contents of a radio communication transmitted for use by the general public.

COURT DECISIONS AND ADMINISTRATIVE ACTIONS

U.S. Court Opinions

WGN Continental Broadcasting Co. v. United Video, Inc., 693 F.2d 622 (7th Cir. 1982). Copyright protection extends to teletext transmission contained within the vertical blanking interval of the primary programming transmitted, so long as the teletext transmission is intended to be viewed with, and as an integral component of, the primary programming.

Universal City Studios, Inc. v. Sony Corp. of America, 659 F.2d 963 (9th Cir. 1981), cert. granted , 102 S.Ct. 2926 (1982). (Argued January 1983.) Homevideo recording of television broadcasts of Plaintiff's copyrighted audiovisual materials is not a fair use, but an infringement of Plaintiff's copyright.

Eastern Microwave, Inc. v. Doubleday Sports, Inc., 691 F.2d 125 (2d Cir. 1982), cert. denied, 103 S.CT. 1232 (1983). Retransmission by a communications common carrier of broadcast programming (including appellee's protected audiovisal work) to cable television systems in distant markets where the common carrier had no direct or indirect control over selection of the primary transmission or the particular recipients of the retransmission, constitutes passive carriage exempt from copyright liability under 17 U.S.C. §111(a) (3).

Atari, Inc. v. North American Phillips Consumer Electronic Corp., 672 F.2d 607 (7th Cir.), cert. denied, 103 S.Ct. 176 (1982). Although a videogame is primarily an idea unprotectable by copyright law, in this instance, protection extended to the audio visual component of the videogame as expressive material which should receive protection from exact copying.

Tandy Corp. v. Personal Micro Computers, Inc., 524 F. Supp. 171 (N.D.CA. 1981). A computer program is a work of authorship pursuant to 17 U.S.C. §102, and pursuant to the same provision of the copyright law, a silicon chip is a tangible medium of expression. Therefore duplication of a silicon chip upon which a copyrightable computer program is imprinted constitutes infringement of the underlying work. Accord, Williams Electronics, Inc. v. Artis International, Inc., 24 BNA Patent, Trademark, and Copyright Journal 387 (3d Cir. 1982). Cf. Data Cash Systems, Inc. v. J.S. & A Group, 480 F.Supp. 1063 (1979), aff'd on other grounds, 628 F.2d 1038 (7th Cir. 1980).

G.C.A. Corp v. Chance, 24 BNA Patent, Trademark, and Copyright Journal 574 (1982). Copyright in "source code" for certain computer programs held by the manufacturers of silicon wafers for use in the creation of integrated circuits also protects the "object code", because the object code describes the protected source code.

Apple Computer, Inc. v. Franklin Computer Corp., 24 PTCC 388 (1982). Court refused to enjoin the sale of an Apple compatible computer, since it is unclear whether the computer "object code" is copyrightable. Reservations about the copyright in an "object code" itself stems from the inability of a human reader to decipher the code unaided.

Orth-O-Vision, Inc. v. Home Box Office, 474 F.Supp. 672 (S.O.N.Y. 1979). Subscription television provider owning copyrights in audiovisual works was entitled to an injunction preventing unauthorized transmission by a former affilliate of the audiovisual works.

Gilliam v. American Broadcasting Cos., 538 F.2d 14 (2d Cir. 1976). Where defendants acquired domestic distribution rights to television programming authored by plaintiffs, and defendants edited the programming in such a way as to impair the integrity of plaintiffs' work, plaintiffs are entitled to an injunction barring defendants from broadcasting their programming, pursuant to the Lanham Act, common law copyright and breach of contract.

Gottschalk v. Benson, 409 U.S. 63 (1972). A computer algorithm, like any other law of nature, is unpatentable subject matter.

Diamond v. Diehr, 450 U.S. 175 (1981). A novel process of manufacturing incorporating software is patentable pursuant to 35 U.S.C. §102, but the software itself is unpatentable subject matter.

Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470 (1974). The common law of trade secrets is meant to supplement federal systems of protection for intellectual property.

FCC Rulings

CATV Syndicated Program Exclusivity Rules. 79 F.C.C.2d 663 (1980). Eliminates rules limiting the programs and number of TV signals a cable systems may pick up from distant cities.

Foreign Court Opinions

Coditel v. Cine Vog Films, (Supreme Court of Appeals, Belgium, 1981). Unauthorized distribution by a Belgian cable network of German movie copyrighted in France violates Article II bis of the Berne Convention.

Columbia Pictures Industries, Inc. et al v. Stivhting tot Exploitie Centralle Antenne Inrichting Amstrelveen (Supreme Court of the Netherlands, 1981). Pursuant to Article II bis of the Berne Convention, wire relaying of a broadcast requires permission of the copyright

owner, despite the fact that the relay enabled the broadcast to reach a public which would otherwise have been deprived of the program.

GEMA v. Deutche Bundespost, (Federal Court of Justice, Federal Republic of Germany, 1980). Author's consent not required for a simultaneous transmission via a central aerial, where the broadcast signal would have been directly receivable were it not for the presence of tall buildings.

TREATIES AND AGREEMENTS

Copyright

Universal Copyright Convention, as adopted at Geneva in 1952 and 3 Protocols proclaimed in United States by a Presidential Proclamation of August 5, 1955. Revised at Paris, July 24, 1971. 6 UST 2731; 25 UST 1341. Entered into force for United States on July 10, 1974.

Protection afforded. Same protection accorded that contracting states accord other nationals. (Art. II) In addition, "adequate and effective" (Art. I) protection conferred by Convention, directed at ensuring author's economic interests, including protection of author's "basic rights" to authorize reproduction by any means, (Art. V) including public performance and broadcasting. (Art. IV bis)

Exceptions to protection. Does not preclude contracting state from making exceptions to author's basic rights so long as there is no conflict with the spirit and provisions of this convention. (Art. IV bis)

Registration requirements. None. Symbol "c" with name of copyright proprietor and year of first publication is reasonable notice of claim. (Art. III) Duration determined by law of contracting state in which protection claimed. Minimum of life of author plus twenty-five years for most works. (Art. IV)

Developing country exception. Broadcasting organization having headquarters within such countries may obtain license pursuant to Art. V bis I to disseminate translation of sound or visual recording. Must be used for teaching, dissemination of technical information and without commercial gain. Recording must not be exported. (Art. V 8(a))

Intergovernmental committee established. Representatives from 18 states to study problems concerning application and operation of convention. Prepare for revisions and study international copyright law problems. (Art. XI)

Berne Copyright Convention, 1886. Copyright Laws and Treaties of the World, Vol. III, Multilateral Conventions, Items C-through H-I. (The United States is not a signatory because of Berne's "Moral Right" (Art. 6 bis) and prohibition of registration formalities (Art. 5).)

Protection afforded. International union granting same exclusive rights accorded to national of member state and substantial additional rights. (Art. 5) Most distinctive among additional rights is the author's "moral right" to prevent distortion, mutilation or other modification of his work, independent of any transfer by author. (Art. 6 bis)

Exceptions to protection. Domestic legislation to permit reproduction of work, including a sound or visual recording, may be introduced provided no conflict with normal exploitation of work. (Art. 9)

Registration requirements. No formality required or permitted. Protection exists independent of compliance in country of origin. (Art. 5)

Exclusive rights of author. To authorize any broadcasting or diffusion of his work by any means, and to authorize a rebroadcasting by an organization other then the originating one. (Art. 11 bis.) Author maintains his "moral rights" in work broadcast. (Art. 11 bis(2).) Only an ephemeral recording of a broadcast work may be made under limited circumstances; permanent recordings permissible only for exceptional use, such as archival use. (Art. 11 bis(3))

Mexico City Convention on Literary and Artistic Copyright, January 27, 1902. Entered into force for the United States on June 30, 1908. 35 Stat. 1934. Signatories -- 16 Central and South American States, and United States. 7 signatories have ratified. United States ratified on March 31, 1908. It is presently in effect between the United States and only one country, El Salvador.

Protection afforded. Requires that signatory country authors be permitted to enjoy the rights that all other countries' respective laws grant, or in future may grant, to their own citizens. (Art. 5)

Duration. Protection not to exceed term granted in country of origin. (Art. 5)

Rio De Janeiro Convention on Patents of Inventions, Drawings and Industrial Models, Trademarks and Literary and Artistic Property, 1906. Copyright Laws and Treaties of the World, Vol. III, Multilateral Conventions. "Law and Treaty Series," No. 18, of the Pan-American Union (Washington, D.C. 1946). Signatories: 19 Central and South American countries and United States. United States never ratified, but 9 signatories did.

Protection afforded. Creates Bureaus of International American Union for the Protection of Intellectual and Industrial Property which centralize registration of intellectual property from all signatories. Full faith and credit to be given all signatories to the centralized registration. (Art. II) Bureaus also collect and disseminate information regarding protection of intellectual and industrial property.
(Art. VII)

Buenos Aires Convention on Literary and Artistic Copyright, 1910. 38 Stat. 1785. Copyright Laws and Treaties of the World, Vol III, Multilateral Conventions. "Law & Treaty Series," No. 22 of the Pan American Union (Washington, D.C. 1948). (Signatories: 20 Central and South American Nations and United States. 9 have ratified, including United States, on May 1, 1911.)

Protection afforded. Work registered in accordance with laws of state of origin shall be given full faith and credit in any other participating state with no other formality, provided that a statement reserving property right appears in the work. (Art. III)

Inter-American Convention on the Rights of the Author in Literary, Scientific, and Artistic Works. Washington, D.C. 1946. "Law and Treaty Series," No. 19 of the Pan American Union (Washington, D.C. 1946). Signatories: 21 Central and South American States including United States. Ratified by 15. United States never ratified.

Protection afforded. Exclusive right of author to diffuse his work by television, radio broadcasting, or any other method to be devised which reproduces signs, sounds, and images. (Art. 21(e).) Right to reproduce in any form whether in whole or in part. (Art. 21(g))

Registration. No registration formalities once law of contracting state complied with. (Art. 9)

Moral right of author. Author may dispose of copyright, but retains right to oppose any modification or use of work prejudicial to reputation of author. Right waivable. (Art. 11)

Impact on prior inter-American conventions. Replaces earlier conventions, but has no effect on rights acquired under Conventions. (Art. 17)

International Convention for the Protection of Performers, Producers of Phonograms, and Broadcasting Organisations. Rome, 1961. UNESCO Copyright Bulletin, Vol. XIV. pp. 173-182. Signatories: 25 nations, not including United States. Ratified and acceded to by 12.

Protection afforded. Supplement to copyright protection, requiring contracting state to accord performers, producers of phonograms, and broadcasting organizations the same level of protection accorded by domestic law of contracting state. ("National Treatment," Art. 1 and 2)

Protection for broadcasting organizations---"national treatment" if headquarters or transmitter in contracting state. (Art. 6) May authorize or prohibit rebroadcasting or fixation of broadcasts through recordation.

Protection for performers. Must get consent to use performance (record or reproduce). (Art. 7)

Exemption from protection. Limited exception for private use of broadcast or performance; short excerpts for news reporting; ephemeral reproduction; and teaching or scientific research. (Art. 15)

European Agreement Concerning Programme Exchanges by Means of Television Films, 1958. European Treaty Series, No. 27. Signatories: Ratified and signed by 15 nations, all European, except Tunisia and Israel.

Protection afforded. Provides mechanism for broadcast organization under jurisdiction of contracting state to authorize use in other contracting state of films it makes. Broadcasting organization considered maker of film if it has taken initiative and responsibility for making it. (Arts. 1 and 2)

Rights of others in film. If maker not broadcast organization, may transfer right to authorize use in contracting state. (Art. 3) Agreement has no effect upon copyright in underlying work that film is derived from, musical score of films other than for TV. Also does not affect "moral right" in relation to film. (Art. 5)

European Agreement on the Protection of Television Broadcasts, Strasbourg, 1960. European Treaty Series, No. 34. Signatories: 13 European nations. No known ratifications.

Purpose. Addresses rebroadcasting, fixation, or public performance of broadcasts through cable systems and relay links.

Protection afforded. Contracting states may authorize or prohibit rebroadcasting and diffusion by wire activities. Latitude for domestic exceptions.
(Art. 1)

European Agreement on the Protection of Television Broadcasts, Protocol, 1965. Copyright Laws and Treaties of the World, Vol. III, Multilateral Conventions, Item C-2.

Must join Rome Convention to remain a party to this agreement.

Additional Protocol to the European Agreement on the Protection of Television Broadcasts, 1974. Copyright Laws and Treaties of the World, Vol. III, Multilateral Conventions, Item C-2A.

Extends to January 1, 1985, the deadline for becoming a member of the Rome Convention.

Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms. Done at Geneva, Switzerland, October 29, 1971. 25 UST 309, TIAS No. 7808. Signatories: Ratified or acceded to by 32 nations, including the United States, March 10, 1974.

Protection afforded. Prevents unauthorized duplication of phonograms and importation of such duplicates for public distribution. (Art. 2)

Implementation through domestic law. (Art. 3)

Exception to protection. Duplicate authorized if solely educational or made by grant of license which gives rise to remuneration. (Art. 6)

Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite, Brussels, Belgium, 1974. Vol III, Multilateral Conventions, Satellite Convention, Item E-1. Signatories: 15, including the United States. 5 have ratified or acceded. The United States has not yet done so.

Protection afforded. Prevents distributors from distributing program-carrying signals transmitted by satellite which were not intended for those distributors.

Exception. Does not apply when signal distributed on its own territory by distributor for whom signal was not intended, where territory is within UNESCO definition of a developing country and the distribution is for teaching or scientific research. (Art. 4)

Patent

Paris Convention for the Protection of Industrial Property, March 20, 1883. Revised at Brussels, December 14, 1900; at Washington, D.C., June 2, 1911; at The Hague, November 6, 1925; at London, June 2, 1934; at Lisbon, October 31, 1958; and at Stockholm, July 14, 1967. 21 UST 1583; 24 UST 2140, TIAS No. 6923, 7727. Entered into force for the United States on September 5, 1970, with the exception of Articles 1 through 12 which entered into force for the United States on August 25, 1973. Signatories: In excess of 90 nation.

National treatment. Each contracting state must grant the same protection to nationals of other contracting states as it does to its own nationals. (Art. 2)

Priority. Having filed a patent application in accordance with the formalities of one contracting state, the applicant has twelve months to file additional applications in any other contracting states, and still retains for priority purposes the date of the first application, as the date relates back to filings. (Art. 4)

Common rules. All applications filed remain subject to the restrictions or limitations of the laws in each individual state where filed. (Art. 4)

European Patent Convention, Munich. Signed October 5, 1973. Amended by Decision of the Administrative Council of the European Patent Organization, December 21, 1978. Entry into force of last Amendments, June 4, 1981. Implements regulations issued by European Patent Organization after October 7, 1977. Industrial Property Laws and Treaties, Vol. 6, text 2-008, pp. 001-039. Signatories: 11 Members of the European Economic Communities.

Protection afforded. European Patent Office created in Munich with authority to issue a European Patent. The European Patent is effective only in signatory countries the patentee designates.

Relationship to national laws. The European patent is construed according to national law and is meant to co-exist with preexisting national patent systems of signatories.

Patent Cooperation Treaty, Washington, D.C., June 19, 1970. 28 UST 7645, TIAS No. 8733. Entered into force for the U.S. on January 24, 1978, with the exception of Chapter II. Signatories: 20 countries. Ratified by 33 countries including U.S.S.R.

Protection afforded. Creation of a systematic procedure for processing applications, regardless of where they are filed, through a uniform application format, the International Application, acceptable in each contracting state. (Art. 3)

National prosecution. Up to 20 months from first filing date to select where else to seek protection and have priority relate back to original filing date. May obtain pre-filing search of prior art (preliminary examination). (Ch. II)

Governing bodies. Assembly (Art. 53) maintains and develops treaty. Executive Committee (Art. 54) drafts Assembly agenda, submits proposals.

International bureau. The Secretariat for the Assembly. (Art. 55)

Committee for Technical Cooperation. Aids preliminary examining authorities and improves services under the treaty. (Art. 56)

Effect on existing laws. Designed to supplement Paris Union and permit national laws not inconsistent with its purpose. (Art. I)

Convention for the European Patent for the Common Market, (Community Patent Convention). Luxembourg, December 15, 1975. Official Journal of the European Communities, Vol. 19, No. L 17, January 26, 1976. Industrial Property Laws and Treaties, Vol. 6, text 2-001, pp. 001-025. Signatories: 9 European Economic Community states. No countries have ratified.

Protection afforded. A common system of law governing European patents for the contracting states. European patents granted for the contracting states to be called Community Patents, and to have a unitary character. (Arts. 1, 2)

Effect on existing law. Contracting states retain the right to grant national patents.

Council of Mutual Economic Assistance (CMEA) Agreement on the Mutual Recognition of Inventor's Certificates and Other Titles of Protection for Inventions. Havana, December 18, 1976. World Industrial Property, Vol. 4. Signatories: 10 Socialist nations, including the Soviet Union, Cuba, and the German Democratic Republic.

Protection afforded. "Title of Protection" created to be given equal force in all contracting states in order to promote the development of science and avoid duplicative efforts.

Priority. 12 month priority from time of filing in due form in one of the contracting states, during which application may be filed in any other state and relate back to original filing date.

The Hague Agreement Concerning International Registration of Industrial Designs, November 6, 1925. Revised in London, 1934; the Hague, 1960; Monaco, 1961. Complementary Act at Stockholm, 1967. Protocol of Geneva, 1975. WORLD INTELLECTUAL PROPERTY ORGANIZATION, DOC. #262(E). 74 League of Nations Treaties Service 341. Signatories: 15 states are party to the Agreement, not including the United States.

Protection afforded. Creates a central depository for industrial designs which are protected in all signatory countries. (Art. VI)

Locarno Agreement of October 8, 1968. International Classification for Industrial Designs. 23 UST 1389, TIAS No. 7420. Entered into force for the United States on May 25, 1972. Signatories: 15 states. The United States denounced this agreement in July 21, 1982.

Protection afforded. Creates a single classification system for industrial designs consisting of classes and subclasses, and an alphabetical list of goods in which industrial designs are incorporated. Must be used by contracting states for national registration. (Annex)

RELEVANT ACTIVITIES OF KEY INTERNATIONAL ORGANIZATIONS

World Intellectual Property Organizations (WIPO)

Created by the WIPO Convention, Stockholm, July 14, 1967. Entered into force July 14, 1967. Approximately 28 states, including the United States, were party to the original agreement.

Specialized agency of the United Nations which promotes the protection of intellectual property throughout the world. WIPO is divided into two parts: the International Bureau and the General Assembly.

International Bureau (Secretariat). The Director General is elected by the Members of the General Assembly and appoints a staff of about 200.

Charged with ensuring administrative cooperation and coordination among the intellectual property unions created by treaties which WIPO administers. The two principal unions are: the Paris Union (signatories to the Paris Convention of Industrial Property of 1883) and the Berne Union (signatories to the Berne Convention of 1886.) Membership in WIPO is also available to any member of the United Nations, any party to the Statute of the International Court of Justice, or through invitation of the WIPO General Assembly. The Secretariat also performs an educational function, including studying the application of current treaties to new technologies, and concerns and recommends either domestic legislation or treaty revisions to resolve these concerns. Finally, the Secretariat assists in explaining treaty provisions to Members, in drafting domestic intellectual property legislation, in setting up local administrative offices, and in developing adequate copyright legislation.

General Assembly. 84 Members as of January 1, 1983. Meets periodically to decide matters dealing with the treaties and governmental responsibilities under the treaties. There are also working groups which meet to discuss and refine the treaties. Currently, WIPO is working on the International Patent System Revision, the Model Law on Inventions and Know-How, the Model Law on Trademarks, Licensing Guidelines, and other studies.

Permanent Committees. The Permanent Committee for Development Cooperation Related to Industrial Property; the Permanent Committee for Cooperation Related to Copyright and Neighboring Rights; and the Permanent Committee on Patent Information.

The Intergovernmental Copyright Commitee of the UCC works in cooperation with WIPO and meets every two years in Paris or Geneva, Switzerland.

Meetings. In 1983, there are three WIPO meetings of particular relevance scheduled:

Joint UNESCO-WIPO Consultative Committee on the Access by Developing Countries to Works Protected by Copyright - July 4-8, 1983, Geneva, Switzerland.

Committee of Experts on the Legal Protection of Computer Software.

Meeting. June 13-17, 1983, Geneva, Switzerland. UNESCO, Secretariat of the Intergovernmental Copyright Committee.

Functions. Administers certain provisions of the Universal Copyright Convention (to which the United States is a signatory). For example, it receives deposits of signatures and provides certified copies of the Convention. It is also the Secretariat for the Intergovernmental Copyright Committee, an advisory body of selected states which are party to the UCC. This Committee is mandated to study problems arising with applications of the treaty, to suggest treaty revisions as necessary, and to inform members of its activities. The Committee has no judicial authority.

BIBLIOGRAPHY

Books, Articles, and Reports

Bogsch, Arpad L. The Law of Copyright Under the Universal Copyright Convention. 3rd revised edition. R.R. Bowter Co. 1968. pp. 696. An in-depth review of UCC.

Copinger, Scone James. Copyright. Sweet Maxwell. London. Voluminous treatise that treats EEC law in Part VI, and international copyright in Part IX. Reprints major conventions and Appendices.

Dietz, A. Copyright Law in the European Community (1978). A comprehensive Survey of domestic copyright laws in EEC states, noting developing trends and significant cases.

Glenn, Robin Day. Legal Issues Affecting Licensing of TV Programs in the European Economic Community. International Law Institute. Georgetown Law Center, Washington, D.C. 1983. 50 pp. Catalogues and briefly discusses several legal issues affecting the case of television programs in the European Economic Community which should be of particular interest to U.S. nationals.

Ladas, Stephen P. Patents, Trademarks, and Related Rights. Vols. I, II, III. Harvard University Press. Cambridge, Mass. 1975. A detailed treatment of the international regimes of industrial designs, trademarks, trade secrets, and other rights of industrial property, including appendices on the principle international conventions, extensive citations to domestic and foreign laws, and articles in the field of international protection of industrial property.

Lucanik, J. "Direct Broadcast Satellites; Protecting Rights of Contributing Artists and Broadcast Organizations," 12 California Western International Law Journal 204, 1982. Reviews the effect of the growth of communication satellites on the relationship between the contributing artists and the broadcasting organizations; examines the two available methods of those artists and the transmission of broadcasting organizations in a direct broadcast satellite system.

Nimmer, Melville. On Copyright. Vols. I-III. Mathew Bender. 1981. A basic work in U.S. copyright law with a chapter discussing the international system of copyright protection. Vol. III contains international materials.

Pool, Ithiel de Sola and Richard Jay Solomon, "Intellectual Property and Transborder Data Flows," 16 Stanford Journal of International Law 113 (Summer, 1980). Examines the implication of the changing technology of electronic text processing for the protection of intellectual property and analyzes the implications for electronic text handling of such legal constraints as copyright laws.

Reischl, Gerhard. "Copyright Law and the Free Movement of Goods in the Common Market," 18 Copyright 116 (March, 1982). Reviews regulation of the free movement of goods in the Common Market, interprets Art. 36 of the European Economic Community Treaty by the Court of Justice; and reviews the copyright decisions thus far rendered by the Court of Justice.

UNESCO. Records of the International Conference of States on the Distribution of Programme-carrying Signals Transmission by Satellite. Brussels. pp. 6-21. May 1980. UNESCO. WIPO 1974. Collection of documents generated in connection with the Brussels conference including the Convention and Final Act, list of participants, reports of proceedings, and working documents.

UNESCO and the U.S. Copyright Office, et. al. Copyright Laws and Treaties of the World. Bureau of National Affairs. Washington, D.C. 1956 - present. Vols. I to III. Contains detailed descriptions of the copyright regimes of all countries that have enacted laws in the fields, as well as all the copyright treaties.

World Intellectual Property Organization. Industrial Property Laws and Treaties. Looseleaf. WIPO. Geneva. Continually updated. Contains national laws and bilateral and multilateral treaties relating to patent and trademark.

World Intellectual Property Organization. Report of the Expert Group on the Legal Protection of Computer Software (1979). WIPO Report accompanying drafting of proposed model provisions for protection of computer software.

Periodicals

Copyright. Monthly Review of WIPO. United Nations. Geneva. 1965.

Journal of the Copyright Society of the United States of America. New York. N.Y.U. Law Center. 1953.

UNESCO. Copyright Bulletin. Quarterly. UNESCO, Copyright Division United Nations.

U.S. Copyright Office Circulars and Announcements. International Copyright Conventions. pp. 380. International Copyright Relations of the United States.

CONCLUSION

Tedson J. Meyers

From their first meeting, lawyers who planned the May, 1983 conference, "New Developments in International Telecommunications Policy," (sponsored by the Federal Communications Bar Association and Georgetown Law Center) also planned for this Sourcebook. It is tangible evidence of a conviction they shared: that colleagues must leave the conference assisted in finding their way around this subject with a minimum of floundering.

The subject can benefit from intensive study by communications lawyers now. Technologies from which these issues evolve are on the brink of universal application. As you have learned, national policies are not so universal. Many are in conflict, reflecting varied domestic priorities. The rapid pace of technological development has created a legal vacuum. Nevertheless policy is becoming doctrine, and doctrine is emerging in treaties, statutes, and administrative rulings. Foreign governments and their client industries show signs of rapidly losing flexibility. Our own nation's policy development trails behind.

Communications lawyers are being engaged to advise both U.S. and overseas interests. Under the circumstances, improving their preparation is more that a teaching opportunity. It is a professional imperative.

Meeting that imperative is not without obstacles. International communications law is hardly patterned for traditional research. It is not an "available" body of law and precedent. In that regard, it is a briefwriter's dilemma. Equally important, the influence of evolving government policy on nominal precedent can be swift and strong. The influence also can have a different nuance from year to year, or season to season, as U.S. and foreign administrations change -- or change their minds.

As a result, a good deal of "shoe leather" research has been useful for lawyers at work in the field. The influence of policy requires that officials at many levels be polled before opinions are rendered. In the United States, as you have read, the number of agencies presently involved is extraordinary, even by bureaucratic standards. Moreover, the underlying technologies and the industries which exploit them are in ferment -- generating fresh cycles of policy change.

Thus, this Sourcebook has been designed to assist your entry into the subject through many doors. Think of the materials you have read in two ways: as an aid to getting ready, and an aid to getting involved. At this stage, the field of international communications law invites both.

As an aid to getting ready, you now have in hand an exceptional summary of available materials -- enough, in the view of experienced lawyers, to tell you what's going on, and who is responsible. Traditional document research can be initiated through the source lists and bibliographies. Supplementary research and direct dialogue can begin with the directories of national and international bodies. These essays offer a good initial and comprehensive overview of current trends.

As you may have grasped, this is not a realm of swift action or short lead times. Until recently, international communication law has been a study of evolving issues. These issues have grown more significant at home and abroad. But they are not being resolved any faster. For example, many of the relevant FCC proceedings bear aging docket numbers. And, international conferences, both consultative and plenary, are scheduled far in advance. Much deliberative committee work is required in preparing for them.

This leads to the second way to consider this Sourcebook, as an aid to getting involved. It cannot have escaped your notice that U.S. and international bodies prepare positions with private, as well as government, advice. Doctrinal differences and competitive pressures from abroad are forging relationships between the U.S. government and private industry. Many of these relationships are tentative, as both sides search for durable models. Legislative hearings in both Houses of Congress can be expected to explore Executive Branch responsibilities this year. Included will be the role of the private sector.

Meanwhile, lawyering is needed, whether contributed or compensated in the context of CCITT and CCIR study groups; U.S. agency and interagency advisory committees; and business and industry associations, including several having formal relationships with international organizations. All of these require time shared from practice, or the services of attorneys assigned by clients or corporate law departments. Many companies share growing awareness that the outcome of such work affects them. It bears upon efficient corporate operations, the development of new profit centers, and the formation of effective and responsible international public policy.

The organized Bar also offers ways to become involved. This Sourcebook was sponsored by the Federal Communications Bar Association and the International Law Institute of Georgetown University Law Center. It was developed by lawyers working under those auspices. Also, American Bar Association committees on international communications law are very active in both the Section of International Law and the Section of Science and Technology. Opportunities are available in all those organizations for problem solving among professionals, participation in seminars, and contribution to publications.

Such work enhances perspective. Few fields need it more from those who counsel its participants. Events and trends of profound importance often are generated by forces too remote to be affected by the usual arsenal of remedies. Decisions can emanate from distant

authorities, foreign and international. Even firm U.S. policies -- for example, spectrum allocation or orbital assignments -- can be cast in doubt or set adrift by international confrontation. To technical disputes now must be added the influence of political agendas and, at times, desperate competition.

That is a frustrating environment for Americans accustomed to the relatively free hand of private enterprise, made freer still by technological progress and deregulatory trends at home. Nor does it help that the best they can do in their own behalf is to educate government intermediaries who must be their spokesman abroad. In that environment, none is in the mood, as Veronica Ahern observed in her Introduction, to leave those matters "to diplomats and lovers of the paradoxical".

Moreover, communications lawyers asked to step in will not find the way familiar or easy. Conditioned to practical advice, they will find the practical at times elusive in this field. Gaining perspective first is the best tool we can recommend for staking out clear and reliable options.

As suggested, many trails for learning and for gaining perspective are evident in these materials. Those of us already involved welcome your company.

GLOSSARY OF ABBREVIATIONS

AID	Agency for International Development
BIB	Bureau for International Broadcasting
CCIR	International Consultative Committee for Radio
CCITT	International Consultative Committee for Telegraph and Telephone
CEPT	Conference of European Postal and Telecommunications Administrations
COE	Council of Europe
COMMERCE	United States Department of Commerce
COPUOS	Committee on the Peaceful Uses of Outer Space
DBS	Direct Broadcast Satellite
DCA	Defense Communications Agency
EEC	European Economic Communities
FCC	Federal Communications Commission
GATT	General Agreement on Tariffs and Trade
GEN DOC	General Docket
IBI	International Bureau for Informatics
IFRB	International Frequency Registration Board
IRC	International Record Carriers
IRHC	Interdependent Radio Advisory Committee
INMARSAT	International Maritime Satellite Corporation
INTELSAT	International Communications Satellite Corporation
INTERPOL	
ISDN	Integrated Services Digital Network

ITU	International Telecommunication Union
MEM.OP&O	Memorandum Opinion & Order
NAIC	National Association of Insurance Commissioners
NASA	National Aeronautics and Space Adminstration
NSC	National Security Council
NPRM	Notice of Proposed Rulemaking
NTIA	National Telecommunications and Information Administration
NTT	Nippon Telegraph and Telephone
NOI	Notice of Inquiry
OECD	Organization for Economic Cooperation and Development
OMB	Office of Management and Budget
OSTP	Office of Science & Technology Policy
R&O	Report and Order
STATE	United States Department of State
TBDF	Transborder Data Flow
UN	United Nations
UNESCO	United Nations Economic and Social Council
UNCTC	United Nations Center on Transnational Corporations
USIA	United States Information Agency
USTR	United States Trade Representative
RARC	Regional Administrative Radio Conference
WARC	World Administrative Radio Conference
WIPO	World Intellectual Property Organizations

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